Khoisan Languages and Linguistics

QUELLEN ZUR KHOISAN-FORSCHUNG

RESEARCH IN KHOISAN STUDIES

Herausgegeben von Rainer Voßen Goethe-Universität Frankfurt am Main

ISSN 0176 - 3369

Band 36

Khoisan Languages and Linguistics

Proceedings of the 4th International Symposium July 11-13, 2011, Riezlern/Kleinwalsertal

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With the assistance of

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RÜDIGER KÖPPE VERLAG KÖLN 2017 This series is primarily concerned with the publication of source material on the language, history and culture of the Khoisan speaking population of Africa. It furthermore provides a forum for the presentation and discussion of analytical linguistic studies. The series will appear at irregular intervals and comprises both monographs and collections of papers. Contributions should be addressed to:

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The contributions to this volume have been double peer reviewed.

Bibliographic information published by the Deutsche Nationalbibliothek The Deutsche Nationalbibliothek lists this publication in the Deutsche Nationalbibliografie; detailed bibliographic data is available in the Internet at <u>http://dnb.d-nb.de</u>.

ISBN 978-3-89645-880-3

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RÜDIGER KÖPPE VERLAG P.O. Box 45 06 43 50881 Cologne Germany

www.koeppe.de

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Printed with support from the Vereinigung von Freunden und Förderern der Johann Wolfgang Goethe-Universität

Production: Heimdall DTP & Verlagsservice, Rheine / Germany

Printed on acid-free paper which falls within the guidelines of the ANSI to ensure permanence and durability.

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Preface

Anne-Maria Fehn

This volume presents a collection of papers which arose from talks given at the 4th International Symposium of Khoisan Languages and Linguistics, July 11-13, 2011, in Riezlern/Kleinwalsertal. Individual articles cover data from both well-described and lesser known varieties of the Khoe-Kwadi, Kx'a and Tuu language families, ranging from Cultural Anthropology to Historical Linguistics and Comparative Typology.

The first part is devoted to the Khoe-Kwadi language family, starting with ELDERKIN's exploration of the flora and fauna known to speakers of Proto-Khoe as deductible from reconstructions based on available data. The papers by WIRSCHING and RAPOLD both deal with the family's Khoe-khoe branch: WIRSCHING discusses indefiniteness as illustrated by a piece of modern Khoekhoe literature, while RAPOLD analyses tone in the varieties spoken at Tsumeb and Grootfontein. The volume further features data from three under-documented Kalahari Khoe languages: First, CHEBANNE AND COLLINS provide an overview of tense and aspect marking in "Kua", a language probably forming part of the G|ui-G||ana cluster; NAKAGAWA presents evidence from ‡Haba tonology which suggests a closer link with Naro; finally, FEHN discusses the pragmatic implications of direct object marking in Ts'ixa, a little known language of the Okavango Delta with affinities to both the Khwe and Shua dialect clusters.

The second part focuses on the Non-Khoe languages and includes two papers on the Kx'a family's \ddagger 'Amkoe subgroup: BERTHOLD AND GERLACH discuss Serial Verb Constructions in the N!aqriaxe dialect, and SANDS, CHEBANNE AND SHAH deal with hunting terminology, including gesture use, in \ddagger Hoan. The Tuu family's Taa branch is the subject of BODEN's paper, who discusses variation in kinship terminology.

In the concluding section, two papers treat contact phenomena and typological characteristics linking the southern African "Khoisan" languages to the broader spectrum of African linguistic diversity: Möhlig investigates traces of Khoe influence on a Bantu text from the Kavango area, while KÖHLER compares typological peculiarities of "Khoisan" and Omotic languages.

On a final note, the editors would like to extend their thanks to the organizers of the symposium, Rainer Voßen and Bernd Heine, to the referees generously providing comments on preliminary versions of the papers assembled in this volume, and to all the authors contributing their research.

Hunting terminology in [‡]Hoan¹

Bonny Sands (Northern Arizona University)² Andy Chebanne (University of Botswana) Sheena Shah (SOAS University of London)

1. Introduction

Given the importance of Khoisan³ language-speaking groups to huntergatherer studies, we might want to ask ourselves as linguists how we can improve our documentation of the hunter-gatherer legacy of Khoisanspeaking peoples. Although linguistic data is central to the study of kinship systems, for instance (e.g., Barnard 1992; Boden, this volume), it has played less of a role in hunter-gatherer studies generally.

There are numerous ways in which hunting and gathering may be addressed through linguistic data, and there is no clear way to delimit the topic given that food and work are major concerns of daily life. For instance, orienteering is an important skill for foragers which could be the focus of a linguistic study (e.g., Brenzinger 2008). Or, one might try to record texts showing how children acquire foraging techniques; how digging sticks are fashioned; or how meat from kills is butchered, carried and distributed (e.g., Bleek & Lloyd 1911: 275ff.), etc.

Linguists can document texts directly related to hunting and gathering (e.g., Köhler 1991). One may record procedural texts ("how does one go about finding truffles?") as well as personal narratives ("Can you tell me about the time you killed an elephant?") and discussions of traditional practices and beliefs. Different genres (songs, riddles, proverbs, etc.) may touch on attitudes regarding foraging. Even folk tales with animal protag-

¹ The same lect called $\frac{1}{4}$ Hoan here is referred to as $\frac{1}{4}$ Amkoe in Sands & Honken (2014).

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³ The term Khoisan is used here as shorthand for "non-Bantu, non-Cushitic African click languages" and is not meant to imply any genealogical unity between the languages.

onists (e.g., Bala 1998) may include descriptions of hunting and gathering.

The lexicon is, of course, a crucial repository for cultural information (cf. Evans 2010; Nettle & Romaine 2000, etc.). For instance, lexical avoidance or taboo terms for animals in !Xóõ often describe behavioural characteristics or other prominent features (Traill 1998), things that hunters would need to know. Terms for "taste" verbs in G|ui (Tanaka & Sugawara 2010: 69) indicate which foods are preferred and which are dispreferred.

In this paper, we will describe [‡]Hoan linguistic forms used while hunting, and for talking about hunting. Spoken language is avoided during hunting, but a set of conventionalised gestures is used. Thus, both oral and manual lexical forms are presented here. In addition to providing new data on [‡]Hoan, we hope to show how the use of a Kalahari-specific lexical elicitation guide can be an important aid in short-term fieldwork. Due to constraints of space and time, we will not discuss vocabulary related to plants and the gathering of plant and animal foods; the distinction between hunting and gathering implied here is an artificial one.

2. Data

The data in this paper comes from fieldwork on [‡]Hoan conducted in Botswana in September 26 – October 8, 2010 by the authors, with funding from the U.S. National Science Foundation.⁴ Transcriptions of [‡]Hoan in this paper are preliminary, impressionistic phonetic transcriptions rather than phonemic transcriptions. We largely follow the contrasts described in Bell and Collins (2001). [‡]Hoan is a very endangered language (Gerlach & Berthold 2011) which to date has had relatively sparse lexical documentation (but, cf. Gruber 1973, 1975; Collins & Gruber 2014, forthcoming).

⁴ This material is based upon work supported by the National Science Foundation under Grant #BCS-0726200 and BCS-0726198: "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 authors and do not necessarily reflect the views of the National Science Foundation.

The *‡*Hoan speakers consulted for this study live in Dutlwe and Tshwaane (Kweneng District, Botswana), and range in age from middle-aged to elderly. The two older male consultants have primarily been hunter-gatherers, but both also worked in the South African gold mines in the 1960s. The younger male consultants have primarily worked as herders when younger, but now primarily do temporary (agricultural) work. All consultants, however, seemed equally familiar with the gestures and vocabulary related to hunting documented here. This is unsurprising since subsistence hunting is still commonly practiced in the area (cf. Cassidy et al. 2001: A-66).

3. Direct lexical elicitation

We used direct lexical elicitation in order to record a database of repetitions of numerous lexical items produced by several speakers as part of a larger phonetic study to document the sounds of \pm Hoan (cf. Bell & Collins 2001). Often for phonetic studies, words are elicited in sets that reflect different targeted sounds (cf. Ladefoged 2003). We chose to elicit words in semantic sets in part because this tends to help the translations be more precise. We also wanted to document areas of the lexicon that have not previously been documented for \pm Hoan in order to make comparisons with other languages of the Kalahari Basin.

Direct lexical elicitation can be problematic, however, since there may not be a close match between the lexemes of the target language and the words on the targeted wordlist. Many wordlists designed for African languages are not particularly well-suited to work on Khoisan languages (cf. Westphal 1971: 398). For instance, major geographical features such as pans do not occur on most elicitation lists, even though there is extensive vocabulary related to pans and their features (cf. Boden 2009).

First, we will compare hunting terminology in wordlists (see Table 1) designed for research on African languages, then compare our Kalahari elicitation list. FieldWorks Language Explorer (FLEx) (Moe 2007) is not specifically designed for African languages and is not discussed here, but it includes an extensive lexical elicitation guide.

Snider & Roberts (2006)	1700 items
Hutchison (1971)	1069 items
Bouquiaux & Thomas (1992)	Questionnaire 2
	221 items: relatively few hunting terms
	Questionnaire 3
	651 items: a few more hunting terms
	Questionnaire 10 (pp. 449–458)
	"Traditional technologies: 3.3.2 Hunting, war"
Heath (2009)	7537 items

Table 1: Comparative African Wordlists wordlist

The SIL Comparative African Wordlist (Snider & Roberts 2006) is longer than Hutchison's wordlist and does have more nouns related to hunting, cf. Table 2. Bouquiaux and Thomas (1992: 451–458) lists more types of weapons than Snider and Roberts (2006) or Hutchison (1971), but fewer than Heath (2009). It has numerous line drawings, however, which makes it a valuable elicitation aide. Heath's (2009) list designed for Dogon languages is very extensive. For instance, while Hutchison's list lacks a term for 'trap, snare', Heath's list includes 19 different terms for traps. Snider and Roberts' list lacks the lexical item 'gun' but Heath's list includes 17 different terms for types of firearms and an additional 54 items related to the use of firearms.

SNIDER & ROBERTS (2006)	Hutchison (1971)
quiver	quiver
arrow	arrow
bow (hunting)	bow
	gun
poison (on arrrow)	
head of arrow	
lance (spear)	spear
	sword
knife	knife
throwing stick/knife	
	matchet
club, cudgel	
hunting net	
birdlime	
trap	
quiver	quiver

Table 2: Nouns related to hunting

A long wordlist is not necessarily always advantageous to the researcher, however. Consultants may become frustrated if they are repeatedly asked for words that they do not distinguish in their language, and time is wasted that could have been spent recording other words.

The applicability of these African wordlists to Kalahari Khoisan languages might be seen by how they deal with terms relating to arrows. The shortest list only includes 'arrow', while the medium length lists include parts of arrows and arrow poison. Only Heath's long wordlist includes more than one type of arrow, as shown in Table 3, but does not distinguish different types of arrowheads. Bouquiaux and Thomas (1992: 450) only pictures a single, triangular arrowhead. Of course, one may always ask consultants if they can name all the types of arrows they have, but it can be helpful to have a wordlist with types of arrowheads found in the Kalahari. Both researchers and consultants may temporarily forget to mention a particular term which may result in a failure to record the item. Because !Xóõ, Khwe and Ju|'hoansi all have terms for different types of arrowheads, we would expect that [‡]Hoan would as well.

arrow	
arrow poison (formerly from Strophanthus shrub)	
bamboo arrow	
bow (for arrow)	
bow and arrows	
child's bow and arrow for small mammals and reptiles	

Table 3: Partial list of nouns related to hunting (Heath 2009)

As we saw with the nouns, the shorter African wordlists do not have a large number of distinct verbs related to hunting, as shown in Table 4. The longer wordlists, Heath (2009) and Bouquiaux and Thomas (1992) have more terms describing different types of hunts, as shown in Tables 5–6. Net hunting and large collective hunts are not typical of the Kalahari, however (cf. Tanaka 1980).

SNIDER & ROBERTS (2006)	HUTCHISON (1971)
hunt	hunt
stalk	(follow)
track (animal)	
wound (animal)	
slaughter, kill (animal for butchering)	
skin (animal)	
set (trap)	
trap (animal)	
fish	catch fish
	catch
chase	chase
evade	
escape	escape
	lack; miss
shoot	

Table 4: Verbs related to hunting

go hunting, do some hunting
hunt (verb)
(people) go on collective hunt
(hunters) go on a hunting expedition
track, follow (tracks of animal)
collective hunt
small-scale collective hunt
multi-day hunting expedition for 2–5 hunters

Table 5: Partial list of terms related to hunting (Heath 2009)

to hunt (different types: collective hunting (by net, by fire, without fire); individual hunting, to hunt for one's personal use)	
to proclaim, announce the hunt	
hunting meeting (to set the methods and date of the hunt)	
hunting master/hunter, beater/net-setter (in collective hunting)	
hunting rites	
place where hunters meet before beginning net hunting	
hunting meeting (just before the hunt)	
place of the great hunt (forest, savannah, etc.)	
share of the hunt; division (specify the methods)	
empty-handed, to be emptyhanded	
first animal killed by a man in his life, or each year	

Table 6: Partial list of hunting terminology (Bouquiaux & Thomas 1992: 449)

4. Kalahari Khoisan Elicitation Guide (Nouns related to hunting)

We elicited terms in \ddagger Hoan using a guide prepared by the lead author which was based primarily⁵ on the distribution of lexical items found in !Xóõ (Traill 1994), Ju|'hoansi (Dickens 1994) and Ekoka !Xun (König & Heine 2008), Sandawe and Hadza. Ideally, this guide would incorporate

⁵ Terms included in the guide for flora and fauna were not just drawn from these wordlists but also from numerous fieldguides and other publications on plant and animal life in the region.

all the lexical items found in the major modern Kalahari Khoisan lexicons listed in Table 7.

LANGUAGE	SOURCE
!Xóõ	Traill (1994)
Ju 'hoansi	Dickens (1994), Snyman (1975)
!Xun	König & Heine (2008), Snyman (1997)
∔Hoan	Gruber (1975)
Khoekhoegowab	Haacke & Eiseb (1998), Haacke et al. (1997)
Naro	Visser (2001)
Khwe	Kilian-Hatz (2003)
G ui	Nakagawa et al. (2013)

Table 7: Major sources of lexical items in Kalahari Khoisan languages

A semantically-organised elicitation guide based on wordlists found in the same area (Kalahari Basin) allows for a more efficient use of time in short-term fieldwork by improving the proportion of words recorded in each elicitation session. Not only do we spend less time asking for words not likely to be found in the target language (such as terms for different types of rifles), but we get more words (e.g., for different types of arrow-heads) that other wordlists may have missed. A semantically-organised wordlist helps reduce the number of mishearings and mistranslations that may occur⁶ because words occur in the context of the semantic area being discussed. An areal wordlist helps reduce the effect of English language semantics to some extent because semantic distinctions found in Khoisan languages are instead targeted.

Nouns related to hunting taken from (different parts of) the Kalahari Elicitation Guide are shown in Table 8. This list differs in several respects from other wordlists. For one, multiple types of arrowheads and parts of arrows are listed. For another, a 'springhare hooking pole' is also listed. This is a term not found in any general or African elicitation list but is a term found in nearly every Kalahari Khoisan language. Additionally, different types of tracks are differentiated on the list. Because $\frac{1}{2}$ Hoan is re-

⁶ Cf. Vaux and Cooper (1999: 40–42) for a discussion of common "elicitation traps".

lated to Ju (Heine & Honken 2010), some Ju|'hoansi words were added to the list in the event that an additional (potential) prompt was needed.

Objects
Section 24. a. arrow(head) ⁷
wooden arrowhead
bone arrowhead
metal arrowhead
long arrow
blunt arrowhead
barbed arrow, etc.
Section 25. parts of arrow
tip of arrow
shaft of arrow (cf. $!\tilde{a}$)
notch of arrow (cf/x'ali)
joining piece between shaft & tip (cf. $\neq \dot{u}$)
Section 26. a. quiver
-
Section 27. a. arrow poison, (cf. <i>kxàrù</i> , from a pupa)
Section 27. a. arrow poison, (cf. <i>kxàrù</i> , from a pupa)
Section 27. a. arrow poison , (cf. <i>kxàrù</i> , from a pupa) poison
 Section 27. a. arrow poison, (cf. kxàrù, from a pupa) poison Section 28. a. bow (hunting bow)
Section 27. a. arrow poison, (cf. kxàrù, from a pupa)poisonSection 28. a. bow (hunting bow)bow (cf. ŋ!àồ) (*!!)
Section 27. a. arrow poison, (cf. kxàrù, from a pupa)poisonSection 28. a. bow (hunting bow)bow (cf. ŋ!àồ) (*!!)musical bow
Section 27. a. arrow poison, (cf. kxàrù, from a pupa) poison Section 28. a. bow (hunting bow) bow (cf. η!àờ) (*!!) musical bow Section 29. a. gun, rifle
Section 27. a. arrow poison, (cf. kxàrù, from a pupa) poison Section 28. a. bow (hunting bow) bow (cf. ŋ!àồ) (*!!) musical bow Section 29. a. gun, rifle b. bullet
Section 27. a. arrow poison, (cf. kxàrù, from a pupa) poison Section 28. a. bow (hunting bow) bow (cf. ŋ!àồ) (*!!) musical bow Section 29. a. gun, rifle b. bullet c. cartridge
Section 27. a. arrow poison, (cf. kxàrù, from a pupa) poison Section 28. a. bow (hunting bow) bow (cf. ŋ!àồ) (*!!) musical bow Section 29. a. gun, rifle b. bullet c. cartridge d. gun parts
Section 27. a. arrow poison, (cf. kxàrù, from a pupa) poison Section 28. a. bow (hunting bow) bow (cf. ŋ!àờ) (*!!) musical bow Section 29. a. gun, rifle b. bullet c. cartridge d. gun parts Section 31. a. knife
Section 27. a. arrow poison, (cf. kxàrù, from a pupa) poison Section 28. a. bow (hunting bow) bow (cf. ŋ!àồ) (*!!) musical bow Section 29. a. gun, rifle b. bullet c. cartridge d. gun parts Section 31. a. knife b. dagger (cf. dii)
Section 27. a. arrow poison, (cf. kxàrù, from a pupa)poisonSection 28. a. bow (hunting bow)bow (cf. ŋ!àờ) (*!!)musical bowSection 29. a. gun, rifleb. bulletc. cartridged. gun partsSection 31. a. knifeb. dagger (cf. dii)c. tsamma knife

⁷ This guide could have been improved by including the photographs and definitions in Boden & Michels (2000) of various Kxoe arrowheads (e.g., *kx'áó* 'leaf-shaped arrowhead', *wúyàmbò* 'broad-headed arrowhead', *qárà* 'triangular arrowhead').

Section 40. a. forked stick
b. snare
c. trap
forked pole pitched in the ground
Section 41. hooking pole; springhare hook (cf. $g \neq \hat{u}\hat{i}$)
to hook (a springhare in its burrow)
NATURE TERMS
Section 5. a. path
road
animal trail
track of something that has been running
for a long time w/o stopping
path made by small animal
b. tracks of a person
footprint
hoofprint

Table 8: Elicitation guide for hunting terminology: Nouns.

(Jul'hoansi words cited in parentheses are from Dickens 1994)

The actual nouns we managed to elicit for $\frac{1}{4}$ Hoan from the guide in Table 8 are shown in Table 9.

[ð ^{\$} ì]	'quiver' (for arrows)
[[³ ā]]	'arrow' ⁸
[^h ā(^{\$})ä]	'(detachable) arrowhead, bullet'9
[íēx]]	'barbed arrow' ¹⁰
[ŋ‖ə̀ồ]	'bow', 'rifle' ¹¹
[ŋ ŭī]	'spear'
[g+à(²)īn]	'springhare hook'

⁸ Cf. Ju|'hoansi !aq 'iron, steel, steel implement' (Dickens 1994); Ekoka !Xun [||àq] 'iron, metal' (König & Heine 2008).

⁹ Cf. !Xóõ [g∥qhàã] 'arrow (bone tip)' (Traill 1994).

¹⁰ Cf. Ju|'hoansi [||xàì] 'steel-tipped arrow' (Dickens 1994); Okongo !Xun, etc. [||xàí] 'arrow tip with barbs' (Snyman 1997: 88). Gerlach recorded a different form, /n+ebī/ 'barbed arrow'.

¹¹ Cf. Omuramba Omatako !Kun [||nā_u] 'rifle, gun'; Lister farm !Xun [n||ào] 'arrow tip with barbs' (Snyman 1997: 88).

[m]//4]	(a, aluch) (a a, b, a a, b, a a, a u, a b)
[ŋŧúá]	'a club' (to hit things with) ¹²
[!(^h)ā ^{\$} nā]	'(arrow) poison' (one can use
	mamba bile and poison gland or a
	certain ground spider) ¹³
[! ^h ``uī]	'a trap, snare' (e.g., for duiker,
	guineafowl) ¹⁴
[m⊙ú:nə̄]	'loop of a snare' ¹⁵
[ɟǜːsì]	'path'
[j ù:]	'road' ¹⁶
[‖(q)'úlú:]	'small animal path'
[ɡ!ə́'ú]	'foot', 'footprints, track, track of an
	animal'
[!ə́ú: ‖(ʰ)ə̄lā]	'snake tracks'
[ŋ+à [°] ề +ồa]	'track of something that has been
	dragged'

Table 9: Nouns related to hunting in *Hoan*

One cannot always get every item on the targeted list; in fact, we tried but failed to record a few words that have previously been recorded for #Hoan: [$|n\delta\tilde{o}]$ 'hunting party' (Gruber 1975), [$|'\delta\tilde{o}-c\delta no]$ 'net' (Gruber 1975)¹⁷, [$g \| \tilde{\partial} m \tilde{\partial} \tilde{\partial} \tilde{\partial} \tilde{\partial}^n$] 'bow'¹⁸ (Sands et al. 2005). We were, however, able to record several items not found on more generic wordlists.

Because some words are close phonetically as well as semantically, it can sometimes be difficult to be confident that one, in fact, has recorded distinct forms. For instance, we had recorded $[\|\bar{a}^{\hat{s}}a]$ 'arrow' and the very

¹² Cf. !Xóõ [+núa] 'knobkerrie, club' (Traill 1994); Khwe [ŋ+góá] 'stick' (Kilian-Hatz 2003).

¹³ The lack of aspiration on this word for some speakers may be the result of a guttural co-occurrence restriction.

¹⁴ Cf. Okongo !Xun [!hűi] 'snare' (Heikkinen 1986).

¹⁵ Linda Gerlach relates this to /mOúún/ 'head'. She has also recorded a word for the string to which the snare is attached: /|hàà/.

¹⁶ Cf. [dùⁿúⁿ] 'path used regularly', [dáó, dàó] 'path' (Khwe: Kilian-Hatz 2003: 322), etc.

¹⁷ Cf. !Xóõ [|'úũ] 'carrying net made from sinew' (Traill 1994).

¹⁸ Linda Gerlach has recorded /g||àmàzààn/ 'assegai'; Collins and Gruber (2014) have /||gàma/ 'knife, spear'.

similar to $[\|^{h}\bar{\alpha}(\hat{\gamma})\ddot{\alpha}]$ '(detachable) arrowhead, bullet' but thought these were phonetic variants until Linda Gerlach kindly pointed out that she elicited distinct forms: $/\|\bar{a}q\dot{a}/$ 'arrow', $/\|h\bar{a}q'\dot{a}/$ 'arrowhead'.

5. Kalahari Khoisan Elicitation Guide (verbs related to hunting)

Verbs related to certain hunting activities were elicited using the guide shown in Table 10, allowing us to record the items listed in Table 11. This is just a partial guide, as other verbs related to the wounding, killing, butchering and skinning of game are not listed here.

The question as to whether there distinct lexicon related to hunting or not. For instance, we know that following game is a typical activity of hunters, but whether there is a distinct verb for following game, or whether a generic 'to follow' verb is used cannot be ascertained without knowledge of the language in question.

We used play-acting to demonstrate and differentiate ways of stalking prey, an elicitation technique which was fun for us as well as for our consultants. Direct lexical elicitation is often perceived of as a necessary, but somewhat boring task that places the consultant(s) in a passive role. Playacting is one way to make the task engaging for all.

24. hunt	
go hunting	
hunt for more than one day	
set dogs on	
25. shoot	
26. hit (target)	
hit somebody	
hit, slam	
hit with fist	
hit or cane (cf. [n+àm̀'ḿ])	
knock down	
27. a. miss (target)	
32. set a trap (cf. [xáú])	

6. a. run
run fast
begin to run, start
race for
b. run around
7. a. jog
b. gallop
c. run kicking up sand
run carrying bow (with one arm up)
28. follow
follow closely behind (follow track)
29. stalk (cf. hunt)
follow a fresh track
30. chase, pursue
run after
walk after
creep after

Table 10: Elicitation guide for hunting terminology: Verbs. (Words cited from Dickens 1994; König & Heine 2008)

Because we used our elicitation wordlist as a guide rather than as a strict list, we were able to document words lacking simple English glosses, such as #12 in Table 11: [!úí] 'to go looking around stealthily as when hunting' (i.e., 'to be going walk-stop-look, walk-stop-look', as with hands held in prayer; you do not touch anything to avoid making noise). We also recorded #6 [$\|^{h}$ áíī] 'to pull', since this is a verb used to describe how one catches springhares (which must be pulled from their burrows).

1. [! ^h āà]	'to hunt' (also seems to mean 'to swoop')	
2. [tsīì ~ t∫īì]	'to shoot and hit' (with gun or arrow) (cf.	
	Ju 'hoansi tchìn∥hán (vt) 'shoot, hit' (by shooting	
	or throwing))	
3. [(kī) !ùì ~ !ùì]	'to shoot and miss'	
4. [(kī) súɪ]	'to sic your dog on quarry'	
5. [∥q'āò]	'to hit with an assegai'	
6. [∥ʰə́íī]	'to pull' (e.g., a springhare from its burrow)	
7. [‡ qèề]	'to set a trap'	
8. [g∥á'á]	'to tighten a snare, to capture an animal with a	
	snare'	

9. [∥q ^h úlí]	'to escape from a snare'	
10. [ūià g!ə́'ú-nā]	'to walk in another's tracks'	
11. [ūì(ⁿ)]	'to follow an animal's track' (whether the track is	
	fresh or old) ¹⁹	
12. [!úí]	'to go looking around stealthily as when hunting'	
	(i.e., 'to be going walk-stop-look, walk-stop-look',	
	as with hands held in prayer; you do not touch	
	anything to avoid making noise)	
13. [(kī) !úí- ùɪ]	'to stalk' (to walk, stop & look)	
14. [‖qˤé-‖q(')àβì]	'to stalk' (when you have seen an animal and you	
	are moving between bushes, and are waiting for	
	an opportunity to strike)	
15. [‖q(')ǝ́βí:-‖q(')ǝ̀βì:]	'to stalk quickly, without stopping' (when you	
	have seen an animal and you are moving be-	
	tween bushes, and are waiting for an opportunity	
	to strike)	
16. [ŋ!ùmà]	'to chase, to pursue, to be on a pursuit' (it may	
	take a long time before catching the animal, this	
	includes chasing an animal to the point of ex-	
	haustion) ²⁰	
17. [!qʰāò]	'to chase, to run after with the intention of	
	catching in the near future' (as a cheetah does)	
18. [ŧχáā]	'to chase away' ²¹	
19. [tsām̀ !ù]	'to chase after and catch', 'to swoop and grab, to	
	swipe away' (as a raptor does, in a fluid gesture)	
	([tsām̀] 'to grab', [!ù] 'take away'))	
20. [ŋ àlùː]	'to run carrying a bow' (i.e., with one arm up)	
21. [! ^h ừrà]	'to run kicking up sand'	
22. [!ə̀rùː]	'to run' ²²	
23. [g+īì]	'to jog'	

¹⁹ Note that [ŋ!áβá] 'to follow' is distinct from #11 'follow in an animal's tracks' and distinct from other verbs referring to the stalking of game.

²⁰ The form in #16 may be cognate with Okongo !Xun [n!òm] 'crawl, stalk' (Heikkinen 1986).

²¹ Compare #18 [$\frac{1}{\chi}$ áā] 'to chase away' with the phonologically similar !Xóõ [$\frac{1}{\chi}$ áa] 'move out of the way' (Traill 1994).

²² Gruber records a different word for 'run', which he gives with a suppletive plural. The form in #22 may well be a borrowing, cf. Naro [!àrò] 'run', [!ārū] 'to start' (Visser 2001); !Xóõ [!álu] (sg) 'jump up suddenly and rush off' (Traill 1994).

24. [zá:βìrì]	'to sprint' ('to run fast for a short distance')	
25. [!gúrâː]	'to gallop'	
26. [ŋ∥ềi ŋ ồa]	'to escape quickly; to jump away quickly and run	
	away' (probably 'jump-escape')	
27. [!ə́rû: cù]	'to take off and run away' (as a deer does when	
	startled by a noise)	
28. [k'ā t∫í]	'to start, to begin to run, to move quickly in	
	fright' (this is not moving in fright due to a big	
	noise. A leopard would move this way)	
29. [ŋ∥ó'ó]	'to catch the scent of' (an animal, scent of danger)	
30. [!gò lè]	'to dodge'	
31. [!śrù !qá(^{\$})]	'to lose one's quarry' (cf. [!ə̀rù:] 'to run')	
32. [‖'álíì-‡'ù]	'to escape by slipping away from one's group'	
33. [ŋ òầ]	'to escape, to run away from'	

Table 11: ⁺Hoan verbs related to hunting²³ (preliminary transcriptions)

It is unlikely that the words in Table 11 comprise a complete list of verbs used to talk about hunting, but we can see that the number of distinct lexical items is greater than might have been elicited using one of the African vocabulary elicitation guides listed in Table 1.

The use of a wordlist does have drawbacks, of course. For one, we did not always manage to record both roots in verbal compounds separately. For another, there is no way to guarantee that we have recorded every word in the semantic field and to be sure that we have translated each word in sufficient detail. For instance, in Table 11 we recorded #23 $[g \neq i\hat{i}]$ 'to jog' but Collins (2002) glosses *[hoam-[hoam* and *n[om-n[om* as 'jog'. Any subsequent elicitation list for \neq Hoan should include all three of these words so that they can be contrasted with one another and defined more precisely.

We did not record any ideophones related to hunting, but we might expect there to be some in $\frac{1}{4}$ Hoan given the presence of words such as $g/kx'\bar{o}bu$ 'sound of a bullet hitting an animal' in !Xóõ (Traill 1994). There may be other types of words that exist but are not easy to elicit directly.

²³ We also recorded phrases for a few items on the elicitation list: 'to go hunting for more than one day' and 'to hunt with a club'.

Expressions for reporting weapon strikes of different animals were remembered by Aasá (Cushitic) speakers (Petrollino & Mous 2010), and there are expressions for dead game animals in Hadza.

6. [‡]Hoan hunting gestures

How hunters communicate while hunting must be considered in the documentation of hunting language. Ignorance about these communicative practices led to anthropologists Knight et al. (2003) speculating that "click systems may impact hunting success" in a positive way, implying that clicks are somehow particularly well-suited for use in languages spoken by hunter-gatherers. This speculation was made despite accounts in the literature (cf. Sands & Güldemann 2009 for a survey) stating that regular speech is avoided during hunting. Sands and Güldemann (2009) pointed out that the Ju|'hoan, Hadza and N|uu actually avoid pronouncing highamplitude clicks while hunting, and Brenzinger (2008: 19) states much the same for Khwe.

The [‡]Hoan fit the previously documented Khoisan pattern of avoiding clicks while hunting. In fact, they avoid talking altogether, even in whisper. In an interview conducted in Dutlwe, 30 September, 2010, Muchuwaiko Tsaidla, Mosekathoshe Molutwane, Suag∥ai N∥aleciexo and Basenane Mosupatsela told us that important things to remember about hunting are that:

- you do not talk
- you go about silently
- you take care to go against the wind so that your scent is not carried to the animals

The [‡]Hoan use conventionalised gestures while hunting. We recorded three distinct gestures used by the [‡]Hoan during hunting using a Canon PowerShot A580 digital camera in video mode. Stills showing these gestures are shown in Figures 1–3.



Figure 1: Hand signal for "Crouch down and be quiet!" (Showing the gesture: Mosekathoshe Molutwane)

The hand signal for "Crouch down and be quiet!" is shown in Figure 1. To convey this meaning, one pats the hand down one or more times, while bending the head and shoulders and crouching down oneself.

The hand signal meaning "There they are/it is; keep quiet!" is shown in Figure 2. To express this meaning, one points the hand forward with the thumb up, as if to make a chopping gesture (but the hand is held still), while the head and shoulders are bent as the person making the gesture crouches.



Figure 2: Hand signal for "There they are/it is; keep quiet!" (Showing the gesture: Muchuwaiko Tsaidla, with Suag ai N aleciexo sitting behind him)

The hand signal expressing the meaning "Get back/Avoid; do not come closer!" is shown in Figure 3. To express this meaning, one crouches down and points backwards. The index finger is pointed and the forearm is swung back past the hips.

The gestures in Figures 1–3 are different than the ones that the Bakgalagadi use though there may be some similarities, our consultants stated. If any of the gestures are the same, it may be because the Bakgalagadi learned them from the [‡]Hoan since the Bakgalagadi relied on their skills in hunting and would often take some of them on a hunt.

There is, as yet, no database of hunting gestures with which we may compare the \ddagger Hoan hunting gestures, though Hindley (2014) is a good start. Emblematic gestures for signs for particular game animals have been noted by Fehn (2011) for Ts'ixa, by Fehn and Mohr (2012) for \parallel Anikhwe, and by Barnard (1978: 15). Symbolic and deictic gestures encoding "type of animal, direction, time and mode of killing" (Fehn 2011: 153-154) exist in Ts'ixa, and likely in other languages.



Figure 3: Hand signal for "Get back/Avoid; do not come closer!" (Showing the gesture: Basenane Mosupatsela)

7. Discussion

The description of lexical items and gestures related to hunting can be documented in part through direct lexical elicitation. We have provided an elicitation guide which has the potential to be used by researchers documenting other Khoisan languages in order to create a cross-linguistic set of vocabulary related to hunting. However, another approach to documenting this area of the lexicon would be to elicit texts or ask questions about the styles of hunting found in the Kalahari in the ethnographic literature, some of which are listed in Table 12. Additional hunting techniques used in the Kalahari include: hunting by chasing (Tanaka 1996) (esp. warthog, porcupine, juvenile or injured animals, followed by spearing or clubbing); equestrian hunting (Tanaka 1991); hunting with dogs (Ikeya 1994). Vocabulary related to hunting in Setswana can be found in Morton & Hitchcock (2014).

HUNTING TOOL/TECHNIQUE	For
bow and arrow	gemsbok, eland, kudu, wildebeest
rope snare	steenbok, duiker, springbok
dog	jackal, bat-eared fox
springhare pole	springhare
bird hunting with rope snare	ostrich, kori bustard, korhaan
spear	python

Table 12: Hunting techniques used by G|ui in **‡**Kade (Tanaka 1980: 144)

Another question to explore is the extent to which gestures are used outside of the hunt. It would be interesting to record a narrative about a hunt. Would the narrator repeat the gestures, or replace them with phrases or particular verbs? Are there oral equivalents to the gestures described here, and would they be verbs or phrases? The fact that verbs for 'be quiet', 'crouch down' and 'stay back' were not on our hunting elicitation guide, yet are meanings expressed during hunting (through the use of gestures) points out a weakness in the guide.

We did not examine hunting terminology from a comparative-historical perspective, apart from noting that the Bakgalagadi are said to have learned hunting gestures from the [‡]Hoan. Hunting terms have been looked at diachronically for Botatwe Bantu languages of South Central Africa (de Luna 2012a & b).

As subsistence patterns in the Kalahari change, so too might hunting vocabularies. The ⁺Hoan consulted in this study all appeared equally fa-

miliar with the hunting terminology documented here, but age-related loss of hunting terminology has been seen in Anong (Sun & Liu 2009: 126–127), a Tibeto-Burman language of Myanmar.

8. Conclusion

This paper has demonstrated how linguistic forms specific to hunting practices may be elicited. We have provided an elicitation guide aimed at the semantic distinctions commonly found in Southern African Khoisan languages. We have a long way to go towards a lexical typology of hunting and gathering terminology, but hopefully, this is a start. A full documentation of the lexicon of hunting in Kalahari languages includes manual forms as well as oral forms. We are fortunate that we were able to record hunting terminology in [‡]Hoan while those who primarily lived as hunters are still alive.

Acknowledgements

We would like thank all the [‡]Hoan language consultants we worked with: Muchuwaiko Tsaidla, Basenane Mosupatsela, Mosekathoshe Molutwane, Suag∥ai N∥aleciexo, Talela Mosupatsela, and Justa Mosekatoshe of Dutlwe and Tshwaane, Botswana.

Thanks also to Henry Honken who helped us by pointing out a number of lexical comparanda; to Amanda Miller, Kemmonye Monaka and Herman Batibo who helped us with logistics; and to Jeff Gruber, Chris Collins, Linda Gerlach and Falko Berthold who allowed us to view their unpublished materials on *‡*Hoan.

We also thank the anonymous reviewer for helpful suggestions.

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