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On the Consonant Correspondences of South Omotic Languages

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7 On the Consonant Correspondences of South Omotic Languages¹⁾

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INTRODUCTION

The Omotic languages are some of the least studied of the Ethiopian languages, and research into the South Omotic (or Aroid languages) lags particularly behind. It has only been during the last ten years that research papers have been published on this topic. Dictionaries or vocabularies, which would provide the basis for research, have not yet been compiled for any of these languages, and research has been limited to rough sketches of phonology and grammar. Only a few comparative studies such as those of Bender (1988, 1991) and Fleming (1988, 1990) have been published so far. The main aim of this paper is to supply basic data for the future progress of comparative studies of this language family.

Having considered this state of affairs, basic vocabularies of four South Omotic languages, i.e., Aari, Hamer, Kara and Dime, were compiled (Table 1), and the phonemic correspondences among them clarified. Banna has been excluded due to a scarcity of material²⁾. As will be indicated later, in most cases, with the exception of homophonic correspondences, it is impossible to clarify the phonological conditions of each correspondence; however, I am convinced that this research paper will provide a basis for future analysis, once the required volume of material has been collected. Fleming's pioneering attempt (1988) to reconstruct the consonants of the South Omotic Languages, based on phonemic correspondences, is highly acclaimed as providing an excellent pathway for future studies. However, the purpose of this paper is to contribute data, and to attempt to establish the precise phonemic correspondences inferrable from the compiled data; thus, it will not venture into postulating reconstructed consonants for Proto-South Omotic.

The basic vocabularies of these languages are from the following sources: Most of the data on the Aari language, of the Barka dialect in particular, were collected by the author. (This material was collected between November 1990 and January 1991 and in May 1993 at Addis Ababa and Jinka.) Forms with an asterisk(*) were referenced from the lexicon appended to Temam Ahmad's thesis (1986), and those with two asterisks are from Carolyn Ford (1985); material related to the Hamer language was mostly referenced from Mary Yohannes (1987), while forms accompanied by an asterisk were taken from Lydall (1976); material pertaining to

the Kara language was either obtained from Hieda (1991a), or was personally provided to this author by Hiroshi Matsuda (These forms are accompanied by an asterisk). I would like to express my deepest gratitude to Mr Matsuda. The data of the Dime language were referenced from descriptions given in Bender (1988) and Fleming (1990)³.

COMPARATIVE VOCABULARY

Table 1 compares the vocabulary of the four languages: Aari, Hamer, Kara and Dime. A total of 240 vocabulary items are listed in alphabetical order according to their meaning. We have obtained data for 240 items for Aari, 218 for Hamer, 173 for Kara, and 113 for Dime. This chart was prepared in order to elucidate the correspondences between these four languages, but sufficient information could not be obtained with respect to the Kara, and, in particular, Dime languages. Even so, we were able to obtain word forms for half of all vocabulary items, even for Dime.

Though the items were not selected from any existing specific basic vocabulary list, the combination of personal pronouns and numerals given in Appendices 2 and 3 do in fact include most words which would comprise a basic lexicon. In addition to everyday vocabulary, vocabulary items pertaining to the culture and subsistence economy of the region (in particular words related to agriculture and pastoralism) are included in the table.

Vocabulary items which display identical words or words derived from the same root are also included in this chart (#131 and #192, #30 and #185, #54 and #153). Also #49 and #201 are loan words from Amharic. There should, of course, be possible cases of loans among the four languages, but we had to content ourselves to treat these as cognates due to a lack of sufficient evidence.

For the Aari verbs, the stem is given. “-mi” is the adjective formation suffix while “-inti” forms are infinitives.

The transcriptions for vowels are given according to the original transcriptions. Most of the transcriptions of consonants are given by the original transcriptions as well. However, the transcriptions for sibilants in the Dime language were unified with the transcriptions for other languages. Also, the tone notations of the Kara language were omitted⁴.

EXTRACTING CORRESPONDING FORMS

First, the vocabulary items which can be considered to be cognates were extracted from the list. The items were then broken down into those which show correspondences and those which do not. The vocabulary items for which correspondences could be inferred but not firmly established, are listed last and parenthesized. Correspondences are indicated by assigning the letters A (Aari), H (Hamer), K (Kara) and D (Dime) to the languages, and placing links (-) between the corresponding ones (Henceforth, these letters will be used to represent the four

Table 1. Basic vocabulary in Aari, Hamer, Kara and Dime

	<i>Aari</i>	<i>Hamer</i>	<i>Kara</i>	<i>Dime</i>	
1	all	muda	wul	paila*	kUll*
2	arm	aani	qosi	aan	aano*/aan
3	arrow	qasti	pElle	haaza	?
4	ashes	bindi	dibini	?	bindo
5	aunt	baako	indaxan	?	?
6	axe	wali	walin	shuko	?
7	back (of body)	buudi	zulo	zuro	?
8	bad	daqali	shi'a	zarbo*	qamu
9	bag	sulBi	?	sorbi	?
10	beans	wohe	?	waha	?
11	bear (give birth)	aD	aDa	aDa	?
12	beard	buuci	buci	buuci*	?
13	bird	apti	afti	?	ipte
14	bite	ga'	ga'a	ga'a*	ga'
15	bitter	TSaqmi	tsEqima	TSakuma	?
16	black	Calmi	tsiya	tsiya*	TSan
17	blade	slati	hade	?	?
18	blood	zom'i	zompi	makasi	maakso*
19	blow	pug	?	puga	?
20	body	zena	zArA*	bisi	zer
21	boil	bol'	?	burika	?
22	bone	lepi	leppi	lapo	k'us
23	bow	qasti	oam	om	?
24	brave	jagna	angipori	?	?
25	bread	balshi	balasha	balasha	?
26	breast	ami	ammi	ami (= nipple)	Immo*
27	bring	ba'	ba'*	ba'a*	?
28	brother	indabsi	indanas	aada (= my mother!)	?
29	burn	ats	koqa	koqa*	ats
30	buy	shen	sEna	?	shint
31	calabash bottle	gusi	?	gusu/gusi*	?
32	calf	oota	qataB	ooto	?
33	call	eel	el*	?	?
34	carry	yed	?	?	kub
35	cat	urro	walta	?	gerj
36	cattle	waaki	waki	waaki	woRan
37	chair	borkota	borkOto	borkoto	?
38	cheese	pila	oita	paja	?
39	chest	tira	sEda	sada	?
40	chicken	baaca	baca	baca*	koyz*
41	child	yintsi	nasi	nasa	nits
42	climb	wut	ut*	?	?

	<i>Aari</i>	<i>Hamer</i>	<i>Kara</i>	<i>Dime</i>
43	cloth (ing)	apla	apala	afal
44	close (to)	ziiTS	?	ziiTS
45	cloud	liila	lilopolo	CiiC*
46	coffee	buna	bunO	?
47	cold	qaji	qEji	qEjIn*
48	come	haad	ni'a	ad
49	command	azzeze	azEza	?
50	count	payd	?	fayd
51	create	pij	fijja	bin
52	cut	tec	taxa	?
53	dance	bayda	kirba	?
54	dark	soyti (= evening)	soti	sooti*
55	day	roor	roro	rooro*
56	destroy	ays	kaisa	kaisa*
57	die	de'	dia	ja'a*
58	dig	book	koya	?
59	disease	hajim	AjImI*	ajimi*
60	dog	aksi	qEski	qasqi
61	donkey	harre	ukuliEng	uquli
62	door	kari	keri	murdapo
63	drink	woC	wusha	wuCa*
64	dry	woc	woci	?
65	dust	baane	silel	bubuni
66	ear	qaami	qami	qaamo
67	earth	fiCa	pe	pee
68	eat	its	etsa	iTSa
69	egg	muqa	muqua	?
70	empty	guri	?	guro
71	enter	ard	ard*	arda*
72	eye	aapi	api	aapi
73	far	pegmi	pege	pege*
74	fart	pus (verb)	?	puuso
75	fast	sanna	sanna	?
76	fat/thick	durpi	durpi	durpi*
77	father	baaba	imba	aba (= my father)
78	feather	siila*	sile	sile*
79	fear (to)	Bash	?	?
80	find	haap	hapidi	haapa*
81	finger	gil'a	surke	saita
82	fire	noha/noo	nu	noo*
83	fish	molo	kara	kaara/kara*
84	flour	Dila	Dilli	Duulo

	<i>Aari</i>	<i>Hamer</i>	<i>Kara</i>	<i>Dime</i>	
85	flower	yelaale	ama	uushumi	?
86	flu	shoola	gulfa	?	?
87	fly (to)	pir	pilla	?	far
88	fool	tulle	mElgimi	marigimi	?
89	foot	duuti	ro	raa (= leg)	dOOto*
90	forest	qotsa	qau	qau*	?
91	full	TSooTSi	tsotsi	TSoosa (= to fill)	k'ox
92	garden (field)	haami	hami	haami*	?
93	girl	anza	anza	anza	amz
94	give	im	iimA	ima*	im
95	goat	derti	qolii	qoli	der
96	God	berii	bairo	bariyo*	yeefu
97	good	laqami	paya	tsali*	ling
98	grandmother	aaka	eike	kaaka	?
99	grass	diira	suDi	?	suunu
100	green	qal'abish	cagi	cagi*	?
101	grind	deys	?	diisa*	?
102	guest	shoocci	shoshi*	Cooci*	?
103	hair	siTS	siti	siti	b@ndo*
104	head	mata	mette	mete	mEto*
105	hear	eser	qansa	esara	qaamso
106	heart	weylemi*/buuda	wEilEm	owilam	buud*
107	here	kuur	kati	kota*	isoo
108	hit	gi'	qanidi	?	giTS
109	honey	kuri	kuri	kuro*	?
110	horn	qoshma*	qoshimpa	koshumo	UshshUm*
111	horse	parda	fErda	?	parda*
112	hot	oyDimi	oiD	oida	?
113	house	eya/eha	ono	oono	eho
114	how	hasin (hamina "which")	hamin	?	asUU
115	how much	meem	maima*	meem*	?
116	hunger	daaq	daki	daaqo	?
117	hunter	adan (= hunting)	adama	adima	?
118	hyena	gudri	gudiri	guduri	?
119	ice	shacci	sheci	?	?
120	intestine	noqorti	nyuqurt	?	?
121	kill	deys	Dessa	desa	dees
122	knee	boqa*	buqo	buko	booq*
123	knife	alpa	halfa	alpa*	alf
124	know	es	Desa	Desa*	Des/dEEso*
125	lame	shoola	?	shokola	?

	<i>Aari</i>	<i>Hamer</i>	<i>Kara</i>	<i>Dime</i>
126 laugh	inCi	anca	hanca*	?
127 lazy	boshim**	boso	?	?
128 leaf	qal'a	haca	?	ergu
129 left	bita	warkata	warakata*	?
130 lion	zob*	zobo	zobo	zof
131 live	dooq	?	?	dah
132 liver	turi	toropo	torabo	taaxto*
133 long	rootmi	guuduub	?	gUddumu'*
134 louse	qasa	qasa	?	garso*
135 love	nash	Eshshime/nash*	nasha*	?
136 make the surface of the ground smooth	say	?	saa	?
137 man	eedi	eddi	edi*	eyyu*/iyyu
138 many	bedmi	irbEnt	buTSi*	Cutt
139 meat	waa	wa	wa	wah
140 milk	raaTSi	ratsi	raaTSi (TSa = to milk)	TSoh (= to milk)
141 moan	eep (= cry)	epi	eepea*	?
142 monkey	qaara	qara	kaara	?
143 moon	arpi	arpi	arpi*	Erpo*/irfu
144 mother	indi	inda	inna (= my mother)	?
145 mountain	bala	Duka	?	EEdo*
146 mouth	apa	apo	apo	'appo*/af
147 mud	qana	coqo	?	?
148 mule	ukuli	ukuli	ukuli*	?
149 name	naami	nabi	naabi/nabi*	nappo*/mizi
150 near	TSeedi	tsedi	TSeedi*	?
151 neck	baari	qoca	zagala	?
152 new	killa	hali	hali*	wolgu
153 night	soyti	iban	?	sutu/gElt*
154 nose	nuki	nuki	nukwi	nuku
155 old	gesha	geco	geco*	?
156 pay	kash	miska	miska*	?
157 poor	qam'i	kupi	?	?
158 pregnant	sirma*	sirma	sermaidina	?
159 pull	gooc	goca	?	?
160 push	sugum	kupa	?	?
161 put down	wod	pOd	?	?
162 question	goysinti	oissa	oisa*	?
163 rain	doobi	dobi	doobo*	deebo*/deebi
164 raise	Daam (= rise up)	Dapa	?	?

	<i>Aari</i>	<i>Hamer</i>	<i>Kara</i>	<i>Dime</i>	
165	rat	untin	uuntin	uutini	uri
166	red	zeymi	zo	zou*	zoob*/zuu
167	return	maat	ormasah	maasa*	?
168	rich	habtibaab	wodumo	wodimo*	?
169	right	likki	gonnene	likki*	?
170	right (hand)	miza	mizaq	mizaq*	?
171	river	baaka	dEiti	nunko* (= water)?	
172	road	googi	goiti	goy*	gash
173	roar	ool	ola*	?	?
174	roast	shoosh	?	shoosha	?
175	root	TSaami (CaaCi**)	caci	?	CeeCo*/CiiCu
176	rope	Daaki	Daki	?	?
177	rotten	Capta*	cEfid	?	?
178	run	zood/haz	gObA	goba*	is/iz
179	salt	sooqi	soqo	sooko	?
180	satisfaction	mishinti	mishi	?	?
181	scratch	qoTS	guska	koskidiina	?
182	search	zig	zEga	zaga	k'ay
183	see	shed	sEda	sheda*	Ingo*/ying
184	seed	Beeta	Beta	?	mIshshIt*
185	sell	shen	sansa (shansha?)	?	?
186	sew	jaag	jaga	jaga*	?
187	shadow	eeshe	shife	?	?
188	sheep	qoli	yati	iyati/yeti*	?
189	short	TSeedi	orgo	TSeedi*	TSed
190	show	Daw	?	dawa	?
191	sing	leeq	warsa	warsa*	dulum
192	sit	dooq	dorq*	darqa*	daho
193	skin	zena	eBe	?	?
194	sleep	raat	woDa/rat*	woda*/raata*	naaxto*/naxt
195	small	tokomi	?	?	Cek'k'
196	smell	shoq	coqa	Coka	shoq
197	snake	guni	guni	guno*	guno
198	sorghum	rubi (isin "grains")	alafa (isin*)	ishing	kamay
199	stand up	wo'/wey**	wEya	?	wuy
200	star	TSoolinto	ezzono	TSaalinto*	beez*
201	start	jammara	jammara	?	?
202	stay	haaqa (= spend the day)	haqqe	?	?
203	stem	gindi	gek	?	?
204	stomach	norti	i	ii (= belly)	?

	<i>Aari</i>	<i>Hamer</i>	<i>Kara</i>	<i>Dime</i>
205 stone	seyeni	seni	sun ⁱ *	laalo*/lalo
206 stop	gar	gAr*	?	?
207 sun	hayi	hai	hayo*	iyy*/eeyo
208 sweat	Cawa	datsa	daatsa*	?
209 swim	waD/waar**	wara	?	?
210 talk	alq	Dalqa	?	?
211 teff	gaaci	gaci	?	?
212 thief	diibi	dibi	diibi*	?
213 thigh	Cini	onoro	goboz	?
214 thin	mot	poDo	?	kol
215 think	qop	qaba	qaaba*	?
	(= memorize)			
216 throw	jaq	Daba	?	jaR
217 tie	Dak	daka	daka	?
218 today	kina	kInA*	?	ine
219 tomb	duuki	duuki	?	?
220 tongue	adim*	'atap	atab	eedIn*
221 tooth	atsi	atsi	atsi*	EEtso*
222 tree/wood	haaqa	hatta	haka	haaGo*/aaRe
223 uncle	awozo	arEk	?	?
224 urinate	shaan	?	shaana*	?
225 vomit	TSaa	?	TSaidiina	?
226 walk	kay	hia	?	?
227 warm	oyDimi	?	?	sool
228 wash	shi'	shiidi	shaya	?
229 water	noqa	noqo	nunko*	naR
230 wedding	ardimi	kemo	keemo	?
			(= bride wealth)	
231 what	hara	a/har*	hara*	wOyO*
232 when	hayinti	ha*	ha*	amoyd
233 white	TSaammi	cEuli	Cauli*	guyD
234 wife	genno	gEshono	mee*	indid
	(= madame)			
235 wild animal	debi	dAbI*	dabi*	?
236 wind	jaga	jibEre	jaga*	?
237 woman	maa	ma	mee*	'amzu
238 wooden vessel	gabate	?	gabati	?
239 year	bona	le'	lee*	bac
240 yesterday	nii	na	?	?

Table 2. Cases of correspondences

	Number of words	Number of corresponding words	Rate of correspondence
AH	218 (= 82 + 76 + 24 + 36)	140 (= 35 + 61 + 10 + 34)	64.2%
AK	173 (= 82 + 76 + 15)	122 (= 35 + 61 + 3 + 23)	70.5%
AD	113 (= 82 + 24 + 7)	65 (= 35 + 10 + 3 + 17)	57.5%
HK	158 (= 82 + 76)	131 (= 35 + 61 + 1 + 34)	82.9%
HD	106 (= 82 + 24)	49 (= 35 + 10 + 1 + 3)	46.2%
KD	82	40 (= 35 + 3 + 1 + 1)	48.8%
AHK	158 (= 82 + 76)	96 (= 35 + 61)	60.8%
AHD	106 (= 82 + 24)	45 (= 35 + 10)	42.5%
AKD	82	38 (= 35 + 3)	46.3%
HKD	82	36 (= 35 + 1)	43.9%
AHKD	82	35	42.7%

languages). For instance, A-H-K-D indicates that correspondences are observed among all four languages.

The aggregate number of vocabulary items which display correspondences is 252, because two categories of correspondences are observed for the following twelve vocabulary items: 18, 29, 48, 89, 95, 105, 106, 113, 114, 178, 194, 220.

For each of list of cognates, the ratio of items which display correspondences was calculated; the results are summarized in Table 2. For example, under A-H-K-D, word forms are obtained for eighty-two items throughout all the languages, out of which those inferred to show correspondences number thirty-five, making the ratio (referred to as the correspondence ratio), therefore, approximately 42.7%.

No correspondences are found among the following twenty-eight items: 3, 5, 8, 17, 24, 34, 35, 58, 81, 85, 86, 97, 99, 128, 138, 145, 147, 151, 160, 171, 187, 193, 195, 203, 213, 214, 223, 227.

Correspondences evidenced are listed below.

a) A-H-K-D: 35 items

14, 26, 36, 40, 41, 43, 47, 63, 66, 68, 72, 82, 93, 94, 104, 110, 121, 122, 123, 124, 130, 139, 143, 146, 149, 154, 163, 197, 221. (137, 166, 194, 196, 207, 229)

b) A-H-K: 61 items

11, 12, 15, 22, 25, 27, 37, 46, 52, 54, 55, 59, 71, 73, 76, 78, 80, 84, 91, 92, 96, 98, 102, 103, 106, 109, 112, 115, 116, 117, 118, 126, 132, 135, 140, 141, 142, 144, 148, 150, 155, 158, 165, 170, 179, 182, 183, 186, 198, 205, 212, 215, 228, 231, 235, 237. (56, 57, 60, 162, 217)

c) A-H-D: 10 items

13, 20, 30, 64, 87, 111, 175, 199. (4, 218)

- d) A-K-D: 3 items
2, 189, 222.
- e) H-K-D:1 item
(16)
- f) A-H: 34 items
6, 18, 28, 33, 42, 45, 51, 62, 69, 75, 114, 119, 120, 127, 134, 157, 159, 173, 176,
177, 180, 184, 185, 202, 206, 209, 211, 219, 240. (161, 164, 210, 226, 234)
- g) A-K:23 items
9, 10, 19, 31, 32, 70, 74, 101, 105, 125, 136, 169, 174, 190, 200, 224, 225, 236,
238. (21, 38, 65, 167)
- h) A-D: 17 items
29, 44, 48, 50, 77, 79, 89, 95, 106, 113, 114, 153, 216, 220. (108, 131, 178)
- i) H-K: 34 items
7, 23, 29, 39, 48, 53, 61, 67, 83, 88, 89, 90, 95, 100, 107, 113, 129, 152, 156, 168,
172, 178, 188, 191, 192, 194, 204, 208, 220, 230, 232, 233, 239. (181)
- j) H-D: 3 items
1, 105, 133.
- k) K-D: 1 item
18.

The data for two-language correspondences indicate the highest correspondence between Hamer and Kara, and low correspondence between Dime and the remaining languages, with the exception of Aari. While there is a problem in the choice of the items, and the insufficiency of the Dime data, it can be postulated that a close affinity exists between the Hamer and Kara languages, followed by Aari, which is positioned externally to the two, with Dime positioned at the remotest fringe of the relationship.

ANALYSIS OF THE CORRESPONDENCES

The pattern of correspondences observed with respect to consonants is detailed in this section. The consonants discussed are listed below based on examples of homophonic correspondences, and are not meant to be reconstructed values.

For each heading, examples of homophonic correspondences for consonants are first given, followed by other examples of correspondences. Comments and explanations are given at the end. Item numbers have been assigned to individual correspondence patterns, among which word-initial correspondences come first, and the word-interior and word-final correspondences are listed after the semi-colon.

In determining homophonic correspondences, a given vocabulary item need not be identical across all four languages; only those forms which display correspondences need to be identical even across two or three languages. A more in-depth study could be undertaken by separating the observed correspondences

into those groups linking two languages and those linking three languages, and by further clarifying the availability of information with regard to the remaining languages. However, in view of the enormous complexities that such a study would entail, and the scarcity of data currently available, collating the data in the manner proposed here is probably more effective, particularly since the data can be modified in step with future developments.

In the following, under the heading of "other correspondences," consonant forms are shown according to the order Aari-Hamer-Kara-Dime.

(1) **b**

Homophonic correspondences: #4, 12, 21, 25, 27, 37, 40, 46, 77, 96, 122, 127; #77, 130, 163, 178, 212, 235, 238.

Other correspondences:

Aari	Hamer	Kara	Dime	
p	b	b		#215
	p	b		#132, 220
m	b	b	pp	#149
b	b	b	f	#130

(2) **B**

Only three examples are elicited for *B*. #184 displays *B* across A-H. #9 and #79 display correspondences with Aari *B*, but with *b* for Kara and Dime, rather than with *B*. Since *B* can also be observed in the Dime language, as described by Fleming, it is difficult to envisage the phonological condition of this phenomenon only from these few examples.

(3) **p**

Homophonic correspondences: #19, 38, 50, 51, 67, 73, 87, 111; #13, 22, 43, 72, 76, 80, 123, 141, 143, 146, 177.

Other correspondences: (Correspondences with *b* have already been explained above, so they will not be referred to here.)

(m	w	p	k	#1)
m	p			#214, #164
w	p			#161
m'	p			#157
m'	mp			#18
m	mp	m	m	#110

Attention should be paid to #18 and #157. Word forms for Kara and Dime were not obtained for both items, but with respect to #157, one can rightly infer from Hieda's lexicon (1991b) that the Kara form might be *qambi*⁵). Then it would imply that:

	Aari	Hamer	Kara
#18	<i>zom'i</i>	<i>zompi</i>	
#157	<i>qam'i</i>	<i>kupi</i>	<i>qambi</i>

The vocabulary items can then be reconstructed as **zompi*, **qampi*. But some difficulties arise when attempting to apply **p>*' to Aari. A plausible explanation

for this sound change could be sought for by looking at the implosive **B*, but then we would run into difficulties in explaining why both the Hamer and Kara languages would display *p*, *b* rather than **B*. I have observed nasalization occurring in the final vowel of the two Aari examples⁶. Though the consonant *m*- is no doubt functioning as the phonological condition for this phenomenon, what is the implication of the final vowel being *-i* as well?

In the category of separate correspondences, there are examples of other languages displaying *m* that correspond to the Hamer *mp*, as observed in #110.

Another interesting example is #1. Correspondences for this vocabulary item could only be observed between H-D, i.e. Hamer and Dime. Since both languages possess the form *Cul* (*l*), with word-initials being *w*-, *k*- respectively, it would allow for the reconstruction of, for example, a **kw*- consonant. One can then infer that *p*- of the Kara form *paila* developed from **kw*-, for **kw*>*p* is a very natural process. Furthermore, by bringing in **a*, it can be posited that the velar characteristic of the word-initial consonant affected the vowels in the three languages, excluding Kara⁷.

Such a hypothesis, however, would hardly explain the vowel *-i*- of Kara. This element is not present among the other languages for #1. In Kara, the vowel sequence of *-ai* is only present in four vocabulary items, #56, #80, #158, and #225. The form observed for #56 differs completely from those of the other languages, while #80 appears in other languages as *-ai* (*-ay*), too. And, both #158 and #225 can be analyzed as having a suffix *-idiina* attached to *serma*-, and *TSa*-, respectively, i.e., there is a morpheme boundary between *a* and *i*. In addition, since similar correspondences of word-initial consonant could not be observed from the 240 vocabulary items, the results were inconclusive.

(4) m

Homophonic correspondences: (word-initial): #18, 23, 69, 88, 104, 115, 156, 167, 170, 180, 237; (word-interior): #18, 59, 92, 94, 106, 114, 115, 158, 168, 201, 230.

Other correspondences: Correspondences can be observed for b, p, n.

m	b	b	pp	#149
m	p			#164
	b		m	#133
n	m	m		#117
m			n	#220
	n		m	#105

With respect to #105, *qansa* is derived from *qam*+*sa* in accordance with the morphophonemic rule *m+s>ns*, displaying a homophonic correspondence of *m*: *m*.

The correspondences of #117 are identical to the numeral "3" correspondence (see Appendix 3).

(5) d

Homophonic correspondences: (word-initial): #4, 76, 89, 95, 101, 116, 131, 163, 192, 208, 212, 219; (word-interior): 28, 39, 48, 50, 71, 106, 111, 117, 118, 133, 137,

150, 161, 168, 183, 189, 220.

Other correspondences:

d	d	j		#57
d	D	d	d	#121
D	D	d		#112
D	d	d		#217
D		d		#190
ø	D	D	D/d	#124
	D	d		#194
	d	d	n	#144

The final example (#144) can be explained by the assimilation of *d* to *n* in the Kara language. With the exception of this particular case and #57, other correspondences show *D*.

The meanings of the two items #176 and #217 are "rope" and "bind, tie," respectively and it is without doubt that the two items originate from the same stem. Though Aari is as observed, in the Hamer language *D* is present in #176, while *d* is present in #217. Unless there has been a description error⁸⁾, the difference of the two consonants is probably utilized to show the difference of the parts of speech. This assumption may be clarified if we obtain the Kara form. The remaining #112, #190 and #194 are unclear.

The relationship between #121 and #124 is interesting. Both display similar forms. From what has been observed up to this point, it is possible to construct **Des* for #124 and **dees* (or **deys*) for #121. Another possibility can be pursued by postulating **dess*, and positing that the *s* was dropped and in its stead the vowel became long due to compensatory lengthening in the Aari and Dime languages. Needless to say, however, a much larger inventory of vocabulary items would have to be analyzed for this hypothesis to hold.

(6) **t**

Most of the vocabulary items display homophonic correspondences. Word-initial correspondences were observed in #52 and #132, and word-interior correspondences in #13, 32, 37, 42, 54, 89, 104, 120, 129, 153, 165, 184, 188, 194, 200, 220 and 238. Other correspondences could only be observed for one item:

TS	t	t		#103
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(7) **D**

Homophonic correspondences: #84, 164, 176; #11.

Other correspondences: Though many of the vocabulary items displayed correspondences with *d*, they will not be repeated here because the explanation would duplicate (5). For other correspondences, correspondences with zero (ø) can be observed.

ø	D	D	D	#124
ø	D			#120

The Aari vocabulary items #124 and #210 display ø (or a glottal stop) in the word-initial, and most certainly originate from **D*. But it is unclear why *D* was not

maintained as it was in Aari.

(8) g

Homophonic correspondences: The majority of vocabulary items display homophonic correspondences.

#14, 31, 70, 108, 118, 133, 155, 159, 172, 178, 197, 206, 211, 234; #19, 73, 88, 100, 182, 186, 236.

Other correspondences: Observation was limited to the following two types:

g	ø	ø		#162
	g	k		#181

#181 also has *k* within the same word. This can be explained either by the assimilation of **g* into *k*, or conversely a dissimilation of **k*.

(9) k

Homophonic correspondences: (Many examples observed.)

#29, 53, 62, 83, 107, 109, 230; #18, 37, 98, 129, 148, 156, 169, 176, 181, 217, 219.

Other correspondences:

k	k	k	R	#36
k	k		ø	#218
k	h			#226
	k	q		#60, 61
ø	k	k		#56
ø	ø	k		#98
q	q	k	q	#47, 122, 196, 229
q	q	k	ø	#110
q	q	k		#142, 15, 179
q	k	q		#116
q	k			#157
q		k	G	#222

Excluding two patterns as exemplified in #60, #61 and #116, the unique feature here is the appearance of *k* in all Kara words. In addition, it is also interesting that Aari has *q* in those cases.

(10) q

Homophonic correspondences: #60, 66, 90, 95, 105, 134, 215; #29, 69, 120, 202, 210.

Other correspondences: (Vocabulary items which display *k* and have been treated in the above section have been omitted here.)

q	q	(n) k	R	#229
q	rq	rq	h	#192
q			h	#131
q			R	#216
c	x	q		#52
ø	q	q		#170

#52 warrants attention. However, the positioning of *x* as defined by Mary Yohannes is unclear. The presence of *c* in Aari cannot be explained either at this

point in time.

A further study of *R*, *h* or *G* observed in Dime and its relation to *q* and *k*, should eventually contribute to the clarification of the position of **q* and **G* in the Proto-South Omotic language.

(11) **G**

Please refer to previous sections.

(12) **c**

c is not present word-initially in the Aari language. In Dime, *c* also only rarely appears word-initially (Fleming 1990: 507). Several cases of *c* appear word-initially in Hamer. Only one example (#100) was observed for Kara.

Homophonic correspondences: #100; #12, 40, 64, 119, 159, 211

Other correspondences:

c	x	q		#51
c (c)	sh	c		#102
C	c	c		#126
C	c		C	#175
C	c			#177
sh	c	c		#155
sh	c	C	sh	#196
	c	C		#233

(13) **C**

C cannot be observed in the Hamer language. Example of correspondences: (Those words which displayed correspondences with *c* only and which were given in the previous section are omitted.)

C	sh	C	C	#63
sh	sh	C		#102
c (c)	sh	c		#102
sh	c	C	sh	#196
C	ts	ts	TS	#16

There are examples of correspondences with *sh* or *c*. The clarification of these relationships is an important task for future research.

(14) **sh**

Homophonic correspondences: #119, 125, 174, 220, 228; #25, 79, 110, 135, 180.

Other correspondences:

While those cases where *sh* corresponds to *C* and *c* have been discussed above, *sh* also displays correspondence with *s*.

sh	c	C	sh	#196
sh	c	c		#155
sh	sh	C		#102
sh	s	sh		#183
sh	s		sh	#30
sh	s (sh?)			#185
sh	s			#127

s	s	sh		#198
C	sh	C	C	#63
c (c)	sh	c		#102

Where Aari *sh* corresponds to Hamer *s*, the following vowels are *e* and *E* respectively, except for #127, and therefore it can be inferred that this difference of the vowel works as the phonological condition of the correspondence. However, it cannot be determined whether we should posit **s* or **sh*. #30 and #185 share the same stem.

As in Aari, there is a stem *geesh* "grow old," most probably **sh* was assimilated into *n* in #234.

(15) s

Homophonic correspondences: #9, 39, 54, 75, 78, 103, 136, 153, 158, 179, 205; #18, 28, 31, 56, 60, 74, 101, 105, 114, 121, 124, 134, 162, 181, 191.

Other correspondences: (Examples displaying correspondences with *sh* are omitted.)

ts	s	s	ts	#41
TS	ts	s		#91
t		s		#167

As for #167, the Aari form is intransitive and its transitive form is *maas*, so it can be speculated that the Kara form is transitive as well.

With regard to #91, since Aari has two *TS*'s and there is also a direct correspondence between Aari and Hamer, it can be postulated that while *TS-TS* was maintained in the Aari language, a dissimilation process (**TS* > **ts* > *s*) occurred in Kara.

(16) z

Homophonic correspondence can be observed for all word-initials and word-interiors: #7, 18, 20, 44, 130, 166, 182; #(49), 93, 170, 178.

(17) j

Homophonic correspondences: #186, 201, 216, 236; #47, 51, 59.

Other correspondences:

d	d	j		#57
l		j		#38

For #57, the process **di* > *j* can be hypothesized.

(18) TS

TS is not present in the Hamer language.

Homophonic correspondences: #189, 200, 225; #44.

Other correspondences:

TS	ts	TS		#15, 91, 140, 150
TS	ts	s		#91
TS	t	t		#103
C	ts	ts	TS	#16
ts	ts	TS	ts	#68
			TS	#108

The examples of homophonic correspondence and the first group of other correspondences can be considered to be a correspondence of **TS*.

(19) *ts*

Examples of correspondences other than those listed for *TS* are as follows:

ts	s	s	ts	#41
ts			ts	#29

In the Aari language, *ts* is never present in the word initial position.

As for #16, the Aari word *Calmi* is made up of *Cal* plus the adjective formation suffix *mi*, so when the forms of all four languages are compared, they are:

<i>Cal</i>	<i>tsiya</i>	<i>tsiya</i>	<i>TSan</i>
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The word-initial consonant and the second consonant are similar across all the languages (*C, ts, TS; l-y-n*). The Hamer and Kara languages also have a vowel at word-final. The most regular appearance of **TS* is *TS:ts:TS:TS*, and for **ts* it is *ts:ts:ts:ts* excepting the word initial position, because in the Aari language, *ts* is not present in the word-initial position, while the Hamer language does not have ejectives. The *C* of the Aari language appears as *C* in all Dime words. On the other hand, the *TS* present in Dime appears as *TS* in Aari, with the exception of the glottal stop observed in #108. When *ts* can be observed for both Hamer and Kara, it is present in Aari and Dime as well.

In this manner, if we assume that the correspondence observed in #16 is a regular correspondence, it will then become necessary to examine more examples in order to reconstruct the proto form.

(20) *r*

Homophonic correspondence can be observed for all word-initials (#55, 71, 89, 140, 194). Many instances of homophonic correspondence can be observed in word-interiors too: #37, 53, 55, 62, 70, 71, 76, 83, 95, 96, 105, 109, 111, 118, 120, 129, 132, 142, 143, 158, 191, 201, 206, 209, 231.

Other correspondences: (all examples observed in word-interior)

l		r		#9, 21
	l	r		#7, 88
n	r		r	#20
r	ll		r	#87

(21) *l*

Excluding a correspondence observed between Aari *l*: Kara *j*, discussed above in (17) and those listed in (20), homophonic correspondences are observed irrespective of their position within the word. (word-initial: #22, 45, 169, 239; word-interior: #1, 6, 25, 33, 43, 45, 61, 78, 84, 95, 106, 123, 125, 148, 152, 173, 200, 210, 233)

(22) *n*

Homophonic correspondences: #41, 48, 82, 135, 149, 154, 229, 240; #2, 4, 30, 46, 65, 75, 105, 113, 114, 126, 144, 165, 185, 197, 200, 205, 218, 224.

Other correspondences:

n	n	n	m	#93
n	n	ø		#165

n	m	m		#117
n	ny			#120
n	n	ng		#198
n	r		r	#20
m			n	#220
r	r	r	n	#194

Of these we have already discussed #117 in (4).

(23) w

Homophonic correspondences: #6, 10, 36, 63, 64, 106, 129, 139, 168, 191, 194, 199, 209; #190.

Other correspondences:

w	p			#161
w	ø			#42

#42 illustrates the elimination of the word-initial *w* in Hamer.

The possibility of a correspondence for #1 has already been discussed in the section related to *p*.

(24) y (The continuum of a vowel + *y* which can be considered as a diphthong is not discussed here.)

Homophonic correspondences: word-initial #188; word-interior #207.

Other correspondences:

'		y		#228
'/y	y		y	#199

With respect to #207, it can be inferred from Aari and Kara forms that in the Hamer language, there is a metathesis of *r* and *i* (or *y*).

The forms for #41 can be divided into two groups: those which have vowel *i* and consonant *ts* (Aari and Dime) and those with vowel *a* and consonant *s* (Hamer and Dime). The *y* present in the word-initial position of Aari probably reinforces the metathesis of *n* and *i*.

(25) h

Homophonic correspondences: #80, 92, 114, 152; #10, 113.

Other correspondences:

q			h	#131
q	rq	rq	h	#192

These two vocabulary items are identical for at least the Aari and Dime languages, and probably so for the remaining two languages as well. Other examples that would parallel the findings are called for, but according to Fleming (1990: 508f.), *h* appears also as a variant of *G* and '.

Apart from these examples, there are many cases where *ø* corresponds to *h* (#48, 59, 123, 126, 139, 178). However, we believe that this reflects the fact that the status of *h* has not been made clear for the individual languages, and therefore many examples could be perceived as displaying homophonic correspondences.

(26) '

The status of this phoneme is quite unclear, too. The following shows the

word-interior correspondences.

Homophonic correspondences: #14, 27 and 48.

Other correspondences:

'	p		#18
'		ø	#21
'	ø	'	#57
'		ø	#239
'/y	y	y	#199
'	ø	y	#228
'		TS	#108

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NOTES

- 1) This article is a revised and expanded edition of the author's earlier publication titled "Phonemic Correspondences within South Omotic Languages" (Tokyo University Linguistic Papers, No. 14, 1995).
- 2) With respect to Banna, this author received invaluable data from Mr Ken Masuda, graduate student of Social Anthropology, Tokyo Metropolitan University, who conducted an anthropological research of the Banna. His data, unfortunately, arrived too late to be incorporated in the body of this article, and so are given as Appendix 1. I wish to express my sincerest gratitude to Mr Masuda for his kind permission to incorporate such valuable material into this article.
Tables showing the correspondences for pronouns and numerals are also given as Appendices 2 and 3. The sources of the data are the same.
- 3) Shigeta (1988: 194) estimates the population of Aari speakers to be at about 130,000, as of 1986. However, other statistics estimate the figure to be less than 70,000. As for Kara, Hieda (1991b: 92), estimates that there are about 2000 people who speak Kara. Though there are no recent estimates regarding the number of people who speak Hamar and Dime, several tens of thousands of people for the former, and about 10,000 for the latter seem to

be the general consensus.

- 4) The repertoire of consonants is as follows (Kara is excluded here because the range is unclear).

Common consonants: p, b, t, d, k, g, B[β], D[d], s, z, sh[ʃ], ts, m, n, r, l, h[h] or [h], w, y[ij], ('[ʔ]).

Other consonants are:

Aari: TS[ts'], C[tʃ'], j[ʒ]

q in Aari is realized phonetically as [k'], [q'], [q], [ɣ]. Hayward does not take them as being ejectives but rather as being phonemically uvular (see Hayward (1990)). B is phonetically realized as [β], [p], [p'].

Hamer: G [g], ny [n], ng [ŋ], (f), (x), rr [r]

Dime: TS [ts'], C [tʃ'], j[dʒ], (ng [ŋ], ž [ʒ]). G is phonetically realized as [k'], [g], [R], [x], [ɣ], [q], [ʔ], [h].

In many languages [p], [f], [ɸ] are present, and at least in Aari and Dime it has been asserted that these are allophones of the same phoneme.

- 5) In Hieda's lexicon, under the vocabulary item "little finger" we see *kambi* (*k'ambi* in Kara) for Koegu, which is identical to the vocabulary item "poor man" which is again *kambi* in Koegu (1991a). The Kara form is not given under the vocabulary item "poor man," but it can be postulated that in the Kara language the word for "little finger" is identical to that for "poor man." Since the Kara form displays correspondences to those of Aari and Hamer, it can be inferred that the word for "poor man" is *qambi* in Kara. Hieda (1991a: 91) points out that this word was borrowed from Kara by Koegu.
- 6) However, if another element is attached to it, such as *zom'i sri* "blood vessel," then nasalization cannot be observed.
- 7) The **kVI* (*l*) form obtained in this manner may show the language's affinity to the Ethio-Semitic languages, as evidenced by *kwall* of Ge'ez, and *hullu* of Amharic, as well as its affinity to other Semitic languages including the Arabic form *kull* and the Hebrew form *kol*. However, similar forms can only be sporadically observed among Omotic and Cushitic languages like *bullo* of Mocha (North Omotic), and *wulla* of Agaw (Central Cushitic). Therefore, possible influence from Amharic cannot be denied either. See Leslau (1959) and Conti Rossini (1905).
- 8) Since Mary Yohannes (1987) presents these two forms as examples of contrasts between *D* and *t*, the description cannot be incorrect.

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Appendix 1. Banna vocabulary (collected by Mr Ken Masuda, a postgraduate student at the Department of Social Anthropology of the Tokyo Metropolitan University)

1	all	wul	44	close (to)	?
2	arm	an	45	cloud	polo
3	arrow	palle	46	coffee	buno
4	ashes	dubini	47	cold	kaji
5	aunt	?	48	come	?
6	axe	tesibi	49	command	?
7	back (of body)	zule	50	count	?
8	bad	siya	51	create	fijja
9	bag	sorba	52	cut	taxa
10	beans	?	53	dance	kerba
11	bear (give birth)	ada	54	dark	sooti
12	beard	?	55	day	roro
13	bird	apti	56	destroy	kaisa
14	bite	ga'a	57	die	diidi
15	bitter	tsaqamiya	58	dig	koya
16	black	tsiya	59	disease	?
17	blade	alpa	60	dog	qaski
18	blood	zombi	61	donkey	ukuli
19	blow	?	62	door	keri
20	body	bishi	63	drink	wucha
21	boil	asha	64	dry	?
22	bone	lepi	65	dust	?
23	bow	om	66	ear	kaami
24	brave	?	67	earth	pei
25	bread	balasha	68	eat	itsa
26	breast	ami	69	egg	omqa
27	bring	Ba	70	empty	guri
28	brother		71	enter	arda
29	burn	qoqa	72	eye	api
30	buy	shana	73	far	pege
31	calabash bottle	karamba, shaaka	74	fart	fusu
32	calf	ooto	75	fast	saana
33	call	el	76	fat/thick	durfi
34	carry	?	77	father	imba
35	cat	wuro	78	feather	sile
36	cattle	waaki	79	fear (to)	?
37	chair	borkoto	80	find	apidi
38	cheese	?	81	finger	surke (= index finger)
39	chest	sada	82	fire	nu
40	chicken	baaca	83	fish	kara
41	child	naasi	84	flour	LiLi
42	climb	wuta	85	flower	aama
43	cloth (ing)	afala	86	flu	fachi, gulfa

87	fly (to)	plla	133	long	gudub
88	fool	malegimi	134	louse	qasa
89	foot	ro	135	love	nasha
90	forest	qau	136	make the surface of the ground smooth	?
91	full	tsotsi	137	man	eedi
92	garden (field)	ami	138	many	gePi
93	girl	?	139	meat	wa
94	give	ima	140	milk	ratsi (tsaa = to milk)
95	goat	quli	141	moan	epi
96	God	bairo, berjo	142	monkey	qara
97	good	paiya	143	moon	arpi
98	grandmother	?	144	mother	inda
99	grass	shuli	145	mountain	Luka
100	green	cagi	146	mouth	apo
101	grind	deesa	147	mud	coqo
102	guest	cooci	148	mule	ukuli
103	hair	siti	149	name	naabi
104	head	mete	150	near	tseedi
105	hear	kansa	151	neck	qorci
106	heart	woilam	152	new	aali
107	here	koti	153	night	iban
108	hit	kana	154	nose	nuki
109	honey	kuri	155	old	gecco
110	horn	koshima	156	pay	kasha
111	horse	ukuli farda	157	poor	?
112	hot	oidi	158	pregnant	sirma
113	house	ooni	159	pull	diza
114	how	amin	160	push	kopa
115	how much	miyamai	161	put down	woda
116	hunger	daaki	162	question	oisa
117	hunter	adama	163	rain	doobi
118	hyena	gudri	164	raise	Daasa
119	ice	sheci	165	rat	untini
120	intestine	noqorti	166	red	zou
121	kill	deesa	167	return	mata
122	knee	boqo	168	rich	wodumo
123	knife	alpa	169	right	gonnu
124	know	lesa	170	right (hand)	mizaka
125	lame	wobo	171	river	baiti
126	laugh	anca	172	road	goiti
127	lazy	boso	173	roar	ilet
128	leaf	aca	174	roast	qoqa (= to burn)
129	left	warakata	175	root	caaci
130	lion	zobo	176	rope	zaani
131	live	?	177	rotten	gemma
132	liver	toropo			

178	run	goba	210	talk	giya
179	salt	soqo	211	teff	gaci
180	satisfaction	mishi	212	thief	dipi
181	scratch	quska	213	thigh	qardo
182	search	zaga	214	thin	moti
183	see	shada	215	think	qabe
184	seed	Beta	216	throw	Daba
185	sell	shansha	217	tie	Daki
186	sew	jaga	218	today	kina
187	shadow	shipe	219	tomb	dooki
188	sheep	yaati	220	tongue	atap
189	short	orgo	221	tooth	?
190	show	Daa	222	tree/wood	aaqa
191	sing	daasa (?)	223	uncle	?
192	sit	doroqa	224	urinate	shan
193	skin	?	225	vomit	tsaa
194	sleep	raata	226	walk	yaiye
195	small	?	227	warm	oidi
196	smell	coqa	228	wash	?
197	snake	guni	229	water	noqo
198	sorghum	isin	230	wedding	keemo (= bride wealth)
199	stand up	?	231	what	aari, haari
200	star	ez	232	when	aa, haa
201	start	?	233	white	cauli
202	stay	kappa	234	wife	geshono
203	stem	?	235	wild animal	debi
204	stomach	ii	236	wind	saille
205	stone	seeni	237	woman	maa
206	stop	?	238	wooden vessel	?
207	sun	ai	239	year	le
208	sweat	daatsa	240	yesterday	na
209	swim	?			

Appendix 2. Correspondences of pronouns

1. Independent Pronouns

	Aari	Hamer	Kara	Banna
sg. 1	ita	inta	inta	inta
2	haana	ya	ya	ya
3m	noo	kisi	noo	kidi
3f	naa		naa	kodi
pl. 1	wota	wosi	wuti	wodi
2	yeta	yesi	yeti	yedi
3	keta	kosi	keti	kina

2. Dependent Pronouns

	Aari	Hamer	Kara	Banna
sg. 1	i	i	i	iyam
2	haa	a	ha	aam
3m	ki	ki noo	ki	kiyam
3f	ko		ko	koam
pl. 1	wo	wo	wo	wom
2	ye	ye	ye	yem
3	kee	ko	kee	kinam

These pronouns are used in conjunction with the accusative marker -m or dative marker -n or with postpositions: in Aari *wom* "us," *won* "to us," *wo kiikin* "with us." In Aari they are also used with relative verbs: *muda seTS kikeezdinda tikikkili(e)*. "What he always says is right." Here Banna forms are given with accusative marker.

3. Possessive Pronouns

	Aari	Hamer	Kara	Banna
sg. 1	ist	ino	isa	isa/inno
2	hant	ano	hasa	asa/anno/hanti
3m	kit	kino	kisa	kisa/kinno/kinti
3f	kot		kosa	kosa/konno/konti
pl. 1	wont	wono	wosa	wosa/wonno/wonti
2	yent	yeno	yesa	yenti
3	kett	kon	kesa	?

Note. Hamer -sa form (genitive): *isa* "my," *asa* "your."

Appendix 3. Numerals 1-10

	Aari	Hamer	Kara	Dime	Banna
1	wollaqa	kAlA	kala	OOkEl	kala
2	qastan	lAmA	lama	qastEn	lama
3	makkan	mEkkam	makkam	mEkEm	makkam
4	oyddi	oidi	oydi	uddu	oidi
5	donq	dong	dong	shinne	don
6	laa	lax	lah		lax
7	tabza	tapa	tsoba		toppa
8	qastantamars	lankay	lonkay		lankai
9	wollaqatamars	sEl	sall		sal
10	tamma	tEbi	tabi		tapi

The problems of the basic numerals in the Omotic languages were treated fully by Zaborski (1988). I agree with him that the numerals play an important role in the internal classification of Omotic languages. As can be seen clearly from the table, Hamer, Kara and Banna numerals up to ten are virtually the same.

Dime "5" is similar to some Omoto forms, e.g. Basketo, *ishin*. Only "3" is common to these languages, which separates them from other Omotic languages.