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ON THE CLASSIFICATION OF BERBER

The purpose of the present study is a survey of the recent models of classification of Berber languages and an introduction of a new model, representing a preliminary result of a series studies of the author in this field (Blažek 2008, 2009[2010], 2010), based on the so-called 'recalibrated' glottochronology developed by Sergei Starostin (1989, 1999/2000).

First of all, two qualiative models of Aikhenvald (1987) and Kossmann (1999) are presented. The authors operate especially with phonological and morhological arguments. They both summarize their results in the block-diagrams.

A. Aikhenvald (1987, 39) calles her model 'structural-typological'. It is based on evaluation of *c.* 40 phonological, morphological and syntactic isoglosses between 47 Berber idioms. She summarizes her results in the block-diagram, which in principle correlates with the geographic distribution of the Berber languages:

South & Central Morocco		North Algeria	North & Northeast Morocco, Northwest Algeria				East Algeria, Tunis, Northwest Libya	
Šilha	Tamazight	Kabyle	Šawiya	Seghrušen	Rif	Snus	Mzab	Djerba
Semlal	Ndir				Senhaja	Šenwa	Wargla	Sened
Tazerwalt	Izayan				Iznasen	Figig	Righ	Zwara
Ntifa	Zgugu					Zekkara		
	Zemmur					Menaser		
	Mgild					Ksurs		
						Salah		

West & Central Libya - West Egypt		
Nefusa		Fezzan
Ghadames	Augila	Siwa

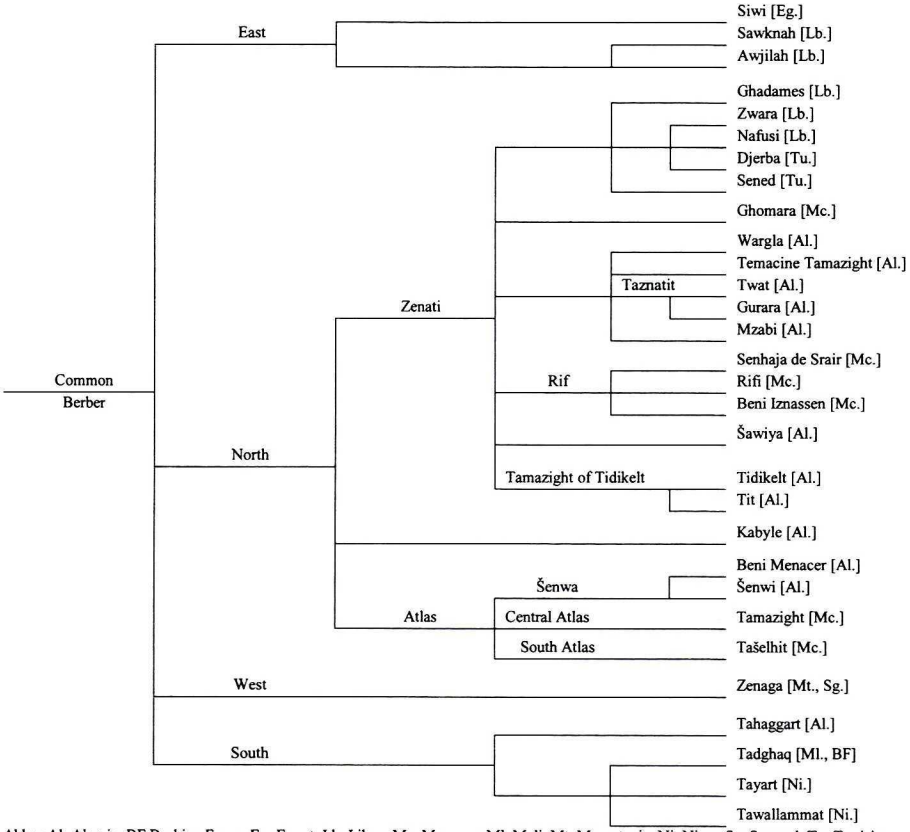
Senegal, Mauritania
Zenaga

Burkina Fasso, Mali, Niger, South Algeria, South Libya	
South Tuareg	North Tuareg
Tayart	Ghat
Tamesgeret	Ahaggar
W+SAwlemmiden	Tadghaq
Taneslemt	

B. Kossmann (1999, 28, 30-32) differentiates two areal blocks, north & south, plus the peripheral isolates:

West Periphery	North Berber area			East Periphery
	Moroccan Atlas	Kabyle	Zenatia	Nefusa
			Rifi, Beni Iznasen; Ait Seghrušen, Ait Warain; Figig; Beni Snus, Šenwa, Beni Menacer; Metmata; Timimun (of Gurara); Mzabi; Wargla; Šawiya; Zwara	El Foqaha
Zenaga				Siwa
	South Berber = Tuareg			Ghadames
				Awjila

C. The model of the Berber classification reflecting a synthesis of traditional points of view appears in the lattest mutation of *Ethnologue* (16th ed., 2009; see [2] http://www.ethnologue.com/show_family.asp?subid=57-16). The inspiration from Ruhlen is apparent (1987, 93; but not 320, where Ghadames is classified with Siwi, Sawknah & Awjilah; let us add that Ruhlen based his classification on the version of Militarev's classification from 1984).



Abbr.: Al. Algeria, BF Burkina Fasso, Eg. Egypt, Lb. Libya, Mc. Morocco, Ml. Mali, Mt. Mauretania, Ni. Niger, Sg. Senegal, Tu. Tunisia.

D. The most detailed version of Militarev's classification was published in the chapter devoted to the Berber-Libyan and Guanche languages, written together with A. Aikhenvald (see Ajxenval'd & Militarev 1991, 157-59). Militarev combined the lexicostatistic and geographical approaches here:

1. **East Berber** branch
Siwa (oasis Siwa in West Egypt), Zurg (oasis Kufra in East Libya), Fezzan (oases Tmessa and El Foqaha in South Libya), Augila (oasis Djalo in North-East Libya), Sokna (North Libya), Ghadames (oasis Ghadames in West Libya).

2. **South Berber** (= **Tuareg**) branch
North group: Tuareg of the oasis Kufra, Tuareg of the oasis Ghadames, Imanghassaten, Uraghen, Ghat, Ahnet (Plateau Muydir); "Tamahaq": Emmidir, Taitoq, Aẓẓer (Plateau Tassili), Ahaggar; Ayr (Plateau Ayr, Kel Ui, Kel Feruan, Kel Tafidet, Ibabidayan etc.), Tuareg of Borku (Chad), Tuareg of Zinder (Niger), East Tawllemmet (= Iulimidden or Awlemidden; Niger-Mali-Burkina Fasso bordeland).
South group: Kel Arokas; "Tamašeq": Heyawa, West Tawllemmet, Takarangat, Tadghaq (= Ifoghas; Plateau Adrar), Taneslemt; "Tamažeq": Ighauilen, Imažoghen (= Iguhadaren), Ida u Sak (= Dausak) - in reality the Songhay dialect with Tamažeq loans.

3. **West Berber** branch
Zenaga (= Taddungiyah; Mauretania - Senegal).

4. **North Berber** branch
4.1 Atlas group:
a) Tašelhait (= Šilha): Tinduft, Ait Umbribed (basin of Dra & Djebel Bani); Izemdaln, Imežžad, Ida u Zikri, Ait Isaffen, Amanus, Ait Mzal, Igliwa, Ait Wazgit etc. (Antiatlas); Tazerwalt, Ait Baamrani, Hawwara, Ida u Semlal, Aštuken, Masst, Tiguga, Seksawa, Ait Wadjes, Ida u Izimmer, Demsira, Ida u Geriun, Demsira (basin of the river Sus); Tuggana, Igedmiun, Ait Immur, Ihahan, Imeghran, Ida u Tanan, Ida u Zikki, Ida u Zal, Ntifa (High Atlas);
b) Tamazight (= Beraber): Ait Messad (region of Demnat); Ait Izdeg, Ait Yahya, Ait Sliman, Ait Khebbaš, etc. (upper r. Dades, High Atlas); Ait Sadden, Ait Yusi, Izayan, Ait Sgugu, Ait Mgild, etc. (Middle Atlas); Ait Ndir, Ait Naaman (region of Meknes);
4.2. Zenatia group:
a) "compact": Ait Seghrušen; Ghmara, Žbala (region of Tanger-Tetuan); Rif: Ait Uriaghel, Ibokkoyen, Ait Tuzin, Temsaman, Ikrayen, Ait Said, Ait Ittift etc.; Bettiwa; Senhaža; Ait Warain; Beni Iznasen; Beni Snus, Beni bu Said (region of Tlemsen); Matmata, Harawa, Ašaša, Halima, Beni Rašed, Beni Ferah, Gheraba etc. (region Frenda-Warsenis); Beni Menaser; Šenwa; Beni Salah, Beni Messaud, Beni Misra (region of the mountain Blida); Šawiya (= Tašawit); East Zenatian: Sened, Tmagurt (region Gafsa in Tunis), Djerba (island Djerba); Zrawa, Taužžut, Tamezret, Šnini, Dwiret (South-East Tunis), Zwara;
b) "of oases": Nefusa (Djebel Nefusa, North-West Libya); Righ (Tuggurt), Wargla, Mzab (all in East Algeria); Figig (South-East Morocco); Tamentit, Tittaf (Twat); Tit (Tidikelt); Ksurs (Gurara - all the oases are in Central Algeria);
4.3. Kabyle (= Taqbaylit) group:
At-Halfun, At-Yiratena, "Zuawa", Iržen, At-Hišema, At-Mangellat etc. (North Algeria).

E. Results of the present study

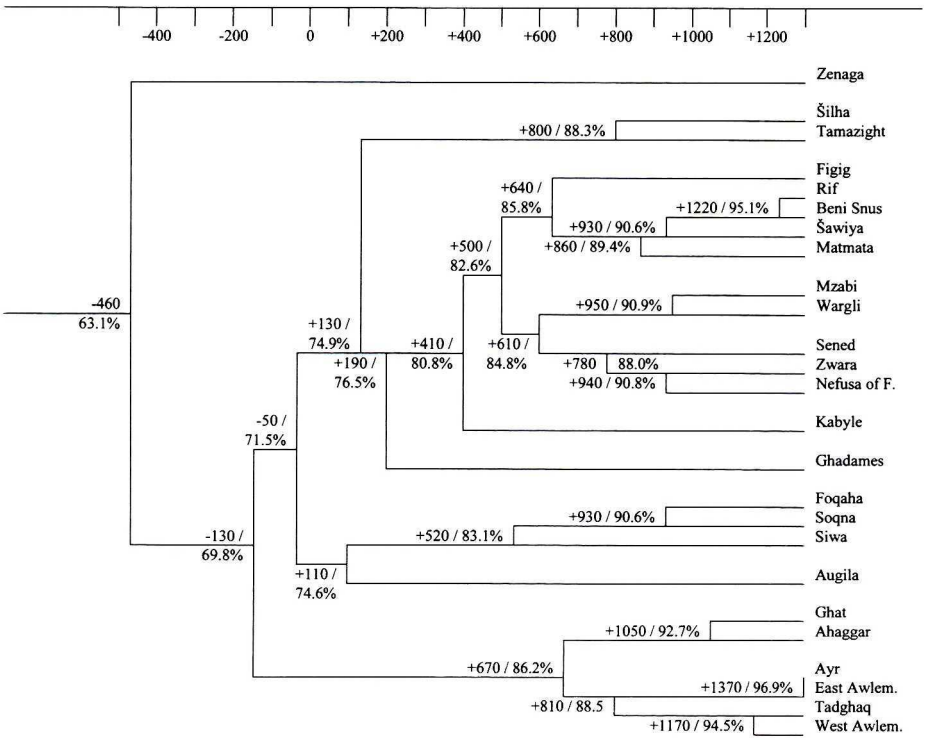
1. The present study is based on comparison of 22 representative Berber idioms, whose wordlists were collected here and in the preceding studies (Blažek 2008, 2009, 2010).
2. Two variants of so-called 'recalibrated' glottochronology developed by Sergei Starostin were applied to map the internal hierarchy in mutual relations between the studied languages:
   A. Glottochronological test based on the average values.
   B. Glottochronological test based on the minimal values.
3. Topology of both diagrams is in principle identical, with exception of the oldest stages of divergence.
4. The approach operating with average values generates Zenaga as the first diverging member of the Berber dialect continuum (*c.* 460 BC). Followed is by a sequence of these separations: South Berber or Tuareg (*c.* 130 BC) and East Berber (*c.* 50 BC) branches. From the remaining, North Berber branch, as first the Shilha-Tamazight group was separated (*c.* 120 AD). This model could be designated as a **sequential** divergence.
5. The variant operating with minimal values implies three coordinate branches: West, represented by Zenaga, South or Tuareg, and Northeast, standing between them, all separated one from another in the beginning of the 7th cent. (*c.* 680 BC). But the difference under 2% between this first divergence and the following separation of North and East branches, i.e. *c.* 80 years or three generations, does not cross the limit of a statistical mistake. Taking it in account, it is possible to formulate a conclusion: all four branches separated allmost in the same time, during the 7th cent. BC. This model could be called as a **parallel** divergence.
6. The lexicostatistical models in genetic classifications of languages do not practically differentiate between shared archaisms and innovations in lexicon and by no means in phonology and morphology. It means, this approach represents only the first approximation in solution of this question. A more complete model of the genetic classification should be formulated only in cooperation of all three approaches: lexicostatistical, phonological, and morphological, differentiating carefully the shared innovations and archaisms.

Table of mutual percentages of lexical cognates between 22 Berber idioms based on the standard 100-word-list.

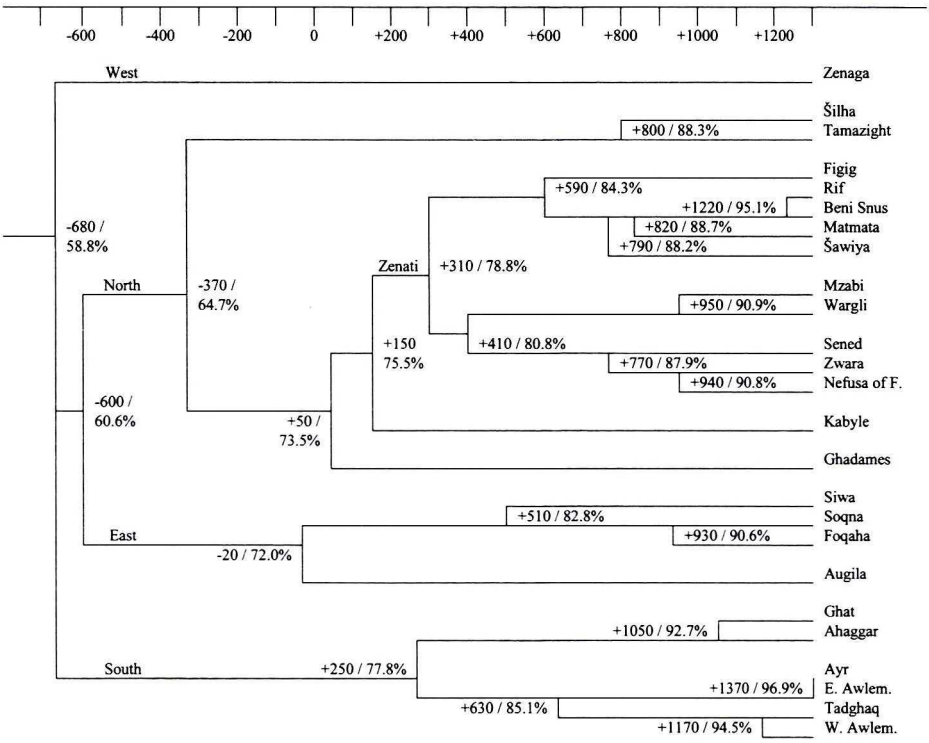
language	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.
1. Zenaga	64.4	66.3	68.9	61.2	62.0	63.0	60.0	58.9	65.5	64.1	62.9	61.5	61.2	64.4	64.7	62.9	64.5	61.8	62.0	63.3	62.6
2. Šilha		88.3	76.2	75.7	70.6	76.4	74.7	64.7	72.0	73.3	73.5	67.6	69.8	64.8	68.9	65.4	60.3	68.8	60.9	58.8	59.3
3. Tamaz.			80.7	79.5	79.0	84.7	79.9	78.5	81.3	82.5	75.6	75.3	71.7	69.5	69.2	65.8	61.1	70.4	60.4	61.0	61.7
4. B. Snus				95.1	86.6	83.7	82.9	82.3	90.7	91.2	84.2	82.9	78.8	75.0	74.6	63.4	66.2	73.9	68.5	70.2	69.6
5. Rif					83.9	83.4	82.2	80.3	90.9	88.7	83.4	81.7	79.9	74.0	74.3	61.3	66.9	72.5	68.2	70.9	68.7
6. Figig						80.1	79.6	80.7	84.5	88.1	79.1	78.7	78.4	73.0	70.9	60.6	60.6	70.8	73.0	66.9	72.4
7. Kabyle							76.4	81.7	84.1	84.8	81.9	76.8	75.5	73.8	67.7	73.0	73.0	78.3	72.6	68.6	70.2
8. Wargli								90.9	86.4	82.0	88.9	85.0	84.4	76.7	77.0	64.2	73.0	80.1	72.2	66.1	73.0
9. Mzabi									86.4	86.4	84.9	80.8	84.8	75.8	78.5	66.0	75.6	78.8	71.8	72.8	72.6
10. Šawiya										88.2	87.5	87.3	84.6	74.7	76.7	64.5	73.5	72.9	73.5	73.8	73.6
11. Matm.											83.3	83.1	82.7	81.0	77.0	64.8	72.6	73.8	72.0	73.5	73.0
12. Sened												88.0	87.9	80.0	76.7	66.9	75.0	79.8	72.6	72.7	72.6
13. Zwara													90.8	76.2	77.4	70.8	75.3	80.3	70.2	71.5	70.6
14. Nefusi F.														81.5	81.0	69.9	76.6	79.4	73.1	70.2	73.2
15. Ghad.															72.7	66.7	70.2	79.8	71.5	71.2	70.9
16. Foqaha																73.6	90.6	83.3	73.0	69.5	71.1
17. Augila																	72.0	78.5	64.1	65.2	65.8
18. Sokna																		82.8	66.2	68.2	67.8
19. Siwa																			73.8	76.4	74.7
20. Ahag.																				90.8	90.9
21. E. Awl.																					94.5
22. Tadgh.																					

Ahag. Ahaggar, B. Snus Beni Snus, E. Awl. East Awlemidden, F. Fasato, Ghad. Ghadames, Matm. Matmata, Tadgh. Tadghaq, Tamaz. Tamazight.

(a) Tree-diagram depicting the Berber dialect continuum based on average values in the glottochronological test.

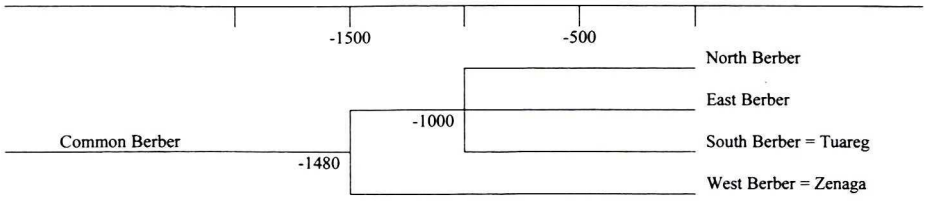


(b) Tree-diagram depicting the Berber dialect continuum based on minimal values in the glottochronological test.



Note:
The results can be distorted by the fact that the 100-word-lists of some of the compared languages, e.g. Augila, Siwa, Sokna and Foqaha, are incomplete or with numerous Arabic loans, which are eliminated before any calculation. It is possible to estimate the interval of real values, in dependence on number of missing or eliminated items: if ***a*** is a number of cognates and ***b*** is a number of the defective word pairs in two compared languages, the real value is an element of the interval ***<a/100; (a+b)/100>***. It is valid also for the calculated values: ***a/(100-b)*** ϵ ***<a/100; (a+b)/100>***. The dispersions reflected by intervals are really wide enough to modify the most deviant results, e.g. Augila-Sokna: 49% ≤ **72%** ≤ 81%; Augila-Foqaha: 53% ≤ **73.5%** ≤ 81%; Augila-Siwa: 49.5% ≤ **78.5%** ≤ 86.5%.

One of the most recent models of classification of the Berber languages was prepared by George Starostin (p.c., Aug 2010). Using the wordlist radically reduced to 50 lexemes and not taking in account synonyms, he proposes the following rough scheme of the mutal relations between Berber branches:



Wordlist A

gloss	Zwara	sources	Sened	Djerba	Šawiya	Matmata	Kabyle	origin
1a. all			kull		kull[Mil]		k'ull	Ar.
1b.							*a(k)k*^{w}	√*-k*^{w}
1c.					qa^{C} [AB]			Ar
2a. ashes			*iɣed*		*iɣəd*[Mil] *iɣəd*[AB]	*iɣeδ*	*iɣed*	√*ɣ-d*
2b.	*išal* (= #70)	Mil						√*k-l*
3a. bark			*tifret*, pl. *tifrai*			*θifli*		√*f-r-y*
3ab.					*θa-fərš-iθ*[Mil]			√*f-r-š*
3c.							*iclem*	
3d.							iq^{w}cer	Ar
4a. belly	*tadist*	M_{57}, 86	*taddist*, pl. *tiddiswin*		*a^{C}ddis*[AB] *aaddis*[Ma]	*a^{C}ăddīs*		√^{C}*-d-s*
4b.							*acek'riḍ*	
4c.							*aculliḍ*	
4d.							adebb^{w}ar	?Ar √*d-w-r* round - #69b
5a. big	*tam(ə)qqart amqar*	M 55: f. Mil	*amoqqrër*	*tamaɣárt* n.	*amuqran*[Mil] *məqqrān*[AB]	*ameqqrān*	*ameqq^{w}ṛan*	√*m-qq-r*
5b.							*abarar*	√*b-r-r*
5c.							*afɣul*	√*f-ɣ-l*, cf. Ah *afeɣul*
6a. bird	*ağḍiḍ*	S_{70}, 44 K, #328	*aštit*, pl. *iištat*					√*g-ḍ-ḍ*
6b.							*is(err)ifeg* : *afeg, sriffeg* #30 fly	√*f-g*
6c.					afrah[Mil] aferoh[Ma]		afrux	Ar
6d.							ttir	Ar
7a. bite	*kərrəš*	Mil				*qarreš*	(*k^{w}*)*errec* mordiller)	√*k-r-š*
7b.			aqer					Ar
7c.						*qeṣṣ*	*yeṭṭ*	cf. Ah *egzeẓ*
7d.							*eqqes*	√*-q-s*
7e.							*ğ^{w}errem*	√*g-r-m*
7f.							ğ^{w}errec	Ar
8a. black			*ayuggel*		*ayuggwal*[Ma]			√*ɣ-ww-l*
8b.	*asṭaf*	Mil		*aṣṣəṭṭâf*			*aṣeṭṭaf*	√*s-ṭ-f*
8c.					*abərkan*[AB] *aberkan*[Ma]	*aberχān*	*aberkan*	√*b-r-k*
8d.							esswad	Ar
9a. blood	*idammen*	Mil	*idemmen*		*iðammən*[Mil] *id'ammən*[AB]	*iðammen*	*idim*, pl. *idammen*	√*d-m*
10a. bone	*íyəss*	M_{57}, 85	*ieɣes*, pl. *iysen*		*iyəs*[Mil] = *iɣəss*[AB], pl. *iḥsan*	*îyĕs*, pl. *iyüssān*	*iyess*	√*ɣ-s*
11a. breast	*ifəf*	M_{57}, 86	*ifef*					√*f-f*
11b.			*idmären* pl.		*iðmarən*[Mil]	*iðmären*	*idmaren*	√*d-m-r*
11c.						*abebbūḥ*, pl. *ibebāḥ*	*tabbuct*, pl. *tibbucin*	√*b-b(b)-C*
11cd.					*abbuš*[AB], pl. *ibbaš*		*b'ubbu(c)* L.	√*b-bb-C*
11e.							*irebbi*, pl. *irebban*	√*r-bb*
12a. burn			*erɣ*		*ierɣa*[Ma] *irɣa*[AB]	*erɣ*	*ṛeɣ*	√*r-ɣ*
12b.							*ezzu*	√*z*; cf. Ah *ezz*
12c.							ezlef	?Ar
12d.							*ss-eknef*	√*k-n-f*; cf. Ah *eknef*
12e.	iraq	Mil	areq		ihrəq[AB]		ehreq	Ar
12f.							cad	Ar
12g.							ddeqdeq	Ar
12h.							ccexcex	Ar

12i.							ek'wi	Ar
13a. claw	*iššar*	Mil	*iššer*, pl. *-en*		*iššər*^{Mil}	-	*iccer*	√*s-k-r*
14a. cloud	*ažənna*	Mil			*tiženə*^{Ma} *t'ažnut'*, pl. *t'ižnaw*^{AB}			√*g-n-w*
14ab.					*asegna*^{B}		*asigna*	√*s+g-n*
14c.						lyéīm		
15a. cold	*asmad*	Mil	*iesmeṭ*		*asemmiḍ*^{Ma} *isəmḍən*^{AB}	*eṣmĕḍ*	*ismiḍ* v.	√*s-m-ḍ*
15b.	ssqi^{C}	M 61						Ar
15c.							eb'red' v.	Ar
16a. come	*yusád*	M 25, 61: he came	*as-ed*	*as-ed*^{R}	*as*^{Mil}	-	*as*	√*-s*
17a. die	*yemmût*	S 716: died	*emmeṭ*		*immeṭ*^{M} *mətt*^{AB}	*emmeθ*	*emmet*	√*-m-t*
18a. dog	*ayḍi*	Mil	*aidi*, pl. *iiṭan*	*aidi*^{R}	*aiðiy*^{Ma} *ayḍ'i*^{AB}, pl. *iḍ'an*	*ayδi*, pl. *iyδān*		√*y-d*, pl. √*y-ḍ+n*
18b.					(*agzin*^{AB}, pl. *igzinən* little dog)	(*aqzīn*, pl. *iqzīnen* little dog)	*aqžun*, pl. *iq"žan*	√*q-z-n*
18c.							(*uççay* lévrier)	
19a. drink	*ásəw*	M 12: imp.	*äsw*	*asw*^{R}	*ṣū*^{Mil} *iswa*^{AB} *isses*^{Ma}	*esū*	*sew*	√*s-w*
20a. dry	*iqqōr*	Mil	*iaqqur*		*qorr*^{Mil} *əqquṛ*^{AB}	*iqqŭr*	*yeqquṛ* v. *aquṛan* adj.	√*-q-r*
20b.							ağermum ad.	?Ar
21a. ear	*tmaẓẓúyt*, pl. *tmaẓẓuyín*	M 55, 94	*tameẓit*, pl. *timeẓin*		*imәžži*, pl. *imәžžan*^{Mil}	*amezzŭy*, pl. *imezzŭyen*	*amezzuy*, pl. *imezzuyen*	√*m-ẓ-γ*
22a. earth	*tmûrat*	S 715: paese	(*amurt*, pl. *timurā* pays)	*tamort*^{R}	(*amort*^{Ma} pays) *θamurθ*^{Mil} *t'murt'*^{AB}	*θāmmūrθ*, pl. *θimūra*	*tamurt*, pl. *timura*	√*m-r*
22b.	(*išal* sand, ash)	Mil; Serra > K #489	*šal*		*šaᶜaᶜal*^{Mil} *šāl'*^{AB}, pl. *išālən*	*šäl*	*akal*	√*k-l*
23a. eat	*á(y)ətš* *hákyətš*	M 34 M 31: fut.	*ečˇ*	*əčˇ*^{Mil} *ečˇ*^{R}	*etš*^{Ma} *əčˇ*^{AB}	*etš*	*eçç*	√*k-s*
23b.	*tattən*	M 38: she ate	*tett*		*tĕttán*^{AB} 3 pl.	hab. *tett*	*itetṭ*	√*t-t*
24a. egg	*taməllalt*	Mil	*tamellält*		*θamellalt*^{Mil} *t'aməlláltˇ*^{AB}, pl. *t'iməllalin*	*θamellālt*, pl. *θimellālīn*	*tamellalt*, pl. *timellatin*	√*m-l-l*
25a. eye	*tiṭṭ*, pl. *tiṭṭawiniw*	M_{57}, 85 M 35	*tiṭ*, pl. *-awin*		*aθiṭ*^{Mil} *t'iṭṭ*^{AB}, pl. *t'iṭṭawin*	*θĕṭṭ*, pl. *θĕṭṭawin*	*tiṭ*	√*ṭ* < ?√*l.t*
25ab.							pl. *allen*	√*l*
26a. fat n.	*tadunt*	Mil	***tādumt***		*addunt*^{Mil} *ddunt*^{B}	*θadwent*		√*d-w-n*
26b					*uqqîrˇ*^{AB}, pl. *uqqîrən*			
26c.							*tasemt*	√*s-m*
26d.							lidam	Ar
26e.							ddhin	Ar
27a. feather	tarîšit	M_{57}, 88			-	črrîš	erric	Ar
27b.					(*t'aržalt*, pl. *t'iržalin* f. of hen)			√*r-g-l*
27c.							*incew*, pl. *inecwan* = 36	cf. Ah *enǧef*
28a. fire	(a)l^{C}afýat	M 3	eláfit		l^{C}afikt'^{AB}		l^{C}afya	Ar < B?
28b.					*afift*^{Ma}			√*f-w*
28c.			*timsi*, pl. *timsiwin*		*θimәs*^{Mil} *timss*^{AB} *imes*^{Ma}	*timssi*	*timess*	√*m-s-y*
29a. fish	*tágna*	M_{57}, 84						√*g-n*
29b.				*trâbit*				√*r-b*
29c.					*aselm*^{Ma}	*iselm*, pl.	*aslem*, pl.	√*s-l-m*

						iselmen	*iselman*	
29d.						lḥūt	lḥut	Ar
30a. fly v.					*afəg*^{Mil} *yufeg*^{Ma}	-	*afeg sriffeg*	√*f-g/y*
31a. foot	*əḍar*	M_{57}, 84	*ṭar*, pl. *iṭaren*	*dar*^{Mil} = *dar*^{R}	pl. *aṭarən ḍar*^{Ma} pl. *iḍ'ǎṛṛən*^{AB}	*ḍâṛ*, pl. *iḍaṛṛen*	*aḍaṛ*, pl. *iḍaṛṛen*	√*ḍ-r*
32a. full	*ičur* *ččur* v.	Mil S > K #186	*ičur*		*ččar*^{B} v. *itšer*^{Ma} *t'ǎččûr*^{AB}	*itšūr*	*açaṛan*	√*ḍ-k-r*
33a. give	*ušiyid* *ušənn*	S 716: dammi M 18: they gave	*uš*		*iuša*^{Ma} *yif & uš*^{AB} (K #503, 506)	*ūš*	*efk'*	√*k-f*
34a. good			*ilha*				*elhu* v	√*l-h*
34b.			iebha					Ar
34c.			asbiḥ				uçbiḥ	Ar
34d.					ḥla^{Mil} iḥla^{AB} 3 sg. *iahala*^{Ma}			Ar
34e.						δ-aɬellāl		Ar
34f.							*ğerrez* v.	√*g-r-z*; cf. Ah *eğrez*
34g.							um^{C}in	Ar
35a. green	*azizaw*	M_{57}, 87	(*azegzaw* blue)	(*azizǎw* blue)	*azizaw*^{Ma} (*azizaw*^{AB} blue)	(*azeğza* blue)	*zegzew* v. be green, blue	√*z-w-z-w*
35b.			*idel / adel*				*adal*	√*d-l*
35c.				ilaṣfar = 100				Ar
					pl. *ibžgən*^{AB}			√*b-z-g*
					aqṣayli^{AB}			?Ar
36a. hair	*əẓagg/əzagg*	M_{57}, 84/86	pl. *zaw-*, sgt. *dzaggut*		*zzaw*, pl. *izəgdan*^{Mil} *zaw*^{AB}, coll. *izaggʷen*			√*z-w*
36b.						*anzād*	*anẓad*	√*m-ẓ-d*
36c.	*azuf*	Mil						√*z-f*
36d.							*incew*, pl. *inecwan* = 27	cf. Ah *enğef*
37a. hand	*əfus* *ofûs*	M_{57}, 85 Mil	*fus*, pl. *ifessen*	*afus*^{R}	*fus*$^{Mil = AB}$, pl. *ifassən*^{AB}	*fûs*, pl. *ifâssen*	*afus*, pl. *ifassen*	√*f-s*
38a. head	*iγəff*	M_{57}, 85	*iḥf*, pl. *iḥfawen*	*iḥf*$^{Mil, R}$	*iḥəf*^{Mil} *iḥf*^{AB}		*ixef*, pl. *axfiwen*	√*γ-f*
38b.						*aqernûʿ*, pl. *iqernâʿ*	*aqeṛṛu*, pl. *iqʷeṛṛa*	√*q-r*
38c.							*abbay*	√*b-γ*
39a. hear	*əsál*	M 47: imp.	*esel*		*isela*^{Ma} *əslən*^{AB} 3 pl.	*isla*	*sel*	√*s-l*
40a. heart	*ul*	M_{57}, 85	*ul*, pl. *-awen*		*ul*^{Mil} = *wûl*^{AB}	*ûl*, pl. *ulawen*	*ul*, pl. *ulawen*	√*w-l*
41a. horn			*išš*, pl. *-awen*		*iš*^{Mil} = *iš*^{M} *išš*^{AB}	*qiš*, pl. *iqīšwen*	*icc*, pl. *acciwen*	√*-s-k*
42a. I	*neč* *nátš*	S 716 M 76	*neč*	*niγ*^{R}	*nəč*^{Mil} *nəčːˣ*^{AB}	*netš*	*nekk*	√*n-k*
42b.				anǎ				Ar
43a. kill	*áynəγ*	M 9: he will kill	*enγi*		*ənγ*^{Mil} *inγin*^{AB} a tuée	*enγ*	*neγ*	√*n-γ*
44a. knee	*əfud*	M_{57}, 86	*fud*, pl. *ifaden*		*fud*^{Mil}, pl. *ifǎddən*^{AB}	*fuδ*, pl. *ifûdden*	*afud*, pl. *ifuden*	√*f-d*
45a. know	*yəssán*	M 26: knows	*essen*		*əssən*^{Mil} *issən*^{AB}	*essen*	*issin*	√*-s-n*
46a. leaf	*tafrayt*	Mil	*tefret*, pl. *tifrai*				*iferr*, pl. *iferrawen*	√*f-r(-y)*
46b.					əlwərqˣ^{AB}	coll. elwerq		Ar
46c.					əlqšqštˣ^{AB}, pl. ləqšaqš			
47a. lie	*iẓẓəl*	Mil						√*ẓ-l*
47b.			*eṭṭes* = 76				*eṭṭes* = 76	√*-ṭṭ-s*
47c.					E *iens*^{Ma}			√*n-s*
47d.					W *iberk*^{Ma}			√*b-r-k*

47e.						θwákka (Ar √*t-w-k*)		Ar
47f.							*gen*	√*g-n*; cf. Ah *eğen*
48a. liver	*tə́sa*	M$_{57}$, 84	*tesa & etsa*, pl. *tisawin*		*assa*^{Mil}	*eθsã*	*tasa*, pl. *taswin*	√*s*
49a. long	*də-zgrar*	Mil	*azegrer*		*azigrar*^{Ma} *azəgrar*^{AB}	*azīrär*		√*z-g-r-r*
49b.							*iγ*^{w}*zif*	√*γ-z-f*
49c.							acettudaw	?Ar
50a. louse	*tíššit*	M$_{57}$, 94	*tillit*, pl. *tilčin / tilliin*		*θiliθ*^{Mil} *išet*, pl. *tiššin*^{Ma}	*θiššet*, pl. *θiššīn*	*tilk'it*, pl. *-in* *tillict*, pl. *-in*	√*l-k*
51a. man	*argâz* *argaz*	P 415, S 716 M 15	*ärgäz*, pl. *irgäzen*	*argaz* = *argaz*^{R}	*argaz*^{AB}, pl. *irgazən*	*ariā̆z*, pl. *iryā̆zen*	*arğaz*, pl. *irğazen*	√*r-g-z*
51b.				*ayəṯmaṣ*				√*y.t* & √*m* sons of their mothers
51c.					(*awt'əm*^{AB}, pl. *iwt'man*)	*auθem*, pl. *iūθmān*		√*w-t-m* or √*w.t* & √*m*
51d.							aterras	Ar
52a. many	*aguda*	Mil						√*g-d-y* (NZ III, 737-38)
52b.			*egget*		*tigit'* ^{AB}		*ṭṭaqqa* *ṭṭuqqet* v.	√*g-(t)* (NZ III, 908-10)
52c.					*labes*^{Ma}			
52d.					*ieharrem*^{Ma}			
52e.					*a*^{C}*ğğib*^{AB}			
52f.						^{C}âiṯa		Ar
52g.						sîḫ		Ar
52h.							*izli*	*azal* value
52i.							*aṭas*	√*ṭ-s*
52j.							nezzeh	Ar
53a. meat	*aysum*	Mil	*aksum*, pl. *susen*	*aysum*	*aksum*^{B} *aisum/ak*^{oMa} *aḵsum*^{AB}, pl. *iḵsman*	*aisum*	*aksum*, pl. *ik*^{w}*esman*	√*k-s-m*
54a. moon	*tazíri* *taźīrî*	M$_{57}$, 87 Mil	*tiziri*		(*t'əziri* clair de lune)	(*tazīri* clair de lune)	(*tiziri* clair de la lune)	√*z-r*
54b.	(*iyyur* quarter of moon)	S > K #712			*ayyur*^{Mil} *yur*^{AB}, pl. *iyā́ren*	*yū̆r*	*aggur*	√*y-r*
55a. mountain	*adrar*	Mil	*adrër*, pl. *idurër*		*aδrar*$^{Mil = AB}$ *adrar*^{Ma}		*adrar*, pl. *idurar*	√*d-r-r*
55b.						lā^{C}äri, pl. l^{C}aryān		Ar
55c.						aγbal		Ar
56a. mouth	*ími* *imî*	M$_{57}$, 85 Mil	*imi*, pl. *imawen*	*imi*^{R}	*imi*^{Mil} *timmišt*^{Mil} *imi*^{AB}, pl. *imawn*	*īmi* *aqĕmmūm*		√*m*
57a. name			*ism*, pl. *ismawen*		*ism*^{Ma} = *isəm*, pl. *ismawn*^{AB}	*ism*	*isem*, pl. *ismawen*	√*s-m*
58a. neck			*iri*, pl. *irawen*		*iri*^{Ma}		*iri*, pl. *iran*	√*r*
58b.	*takrumt*	Mil	(*takrumt* nuque)	(*ta□romt* nuque)	*θakrumθ*^{Mil}	*taχrūmt*, pl. *θiχermīn* cou, nuque		√*k-r-m*
58c.							*amğeṛḍ*, pl. *imeğṛaḍ* : *ag*^{w}*eṛḍ* encolure, col	√*m+g-r-ḍ*
58d.							a^{C}enqiq	Ar
59a. new	d-ájdid	M 93			-	ažδīδ	aždid	Ar
60a. night	*īḍ* *iḍ*	P 415 M$_{57}$, 85	*iṭ*, pl. *ieṭan*		*iḍ*^{AB}, pl. *-ån* *ieḍ*^{Ma}	*ēḍ*	*iḍ*, pl. *uḍan* & *aḍan*	√*ḇ-ḍ*
60aa.	*dg-iḍ*	Mil	*daggit*, pl. *niṭan*			[cf. B Men. *deggīḍ* de nuit]		√*d-g* & √*ḇ-ḍ*
60b.							llil	Ar

61a. nose	*tínzar* pl.	M 102, 219	*tenzert*, pl. *tinzer*	*tenzert*^{R}	*t'inzar*^{AB}, pl. *anzarən*^{Ma}		*inzer*, pl. *anzaren* *tinzert*, pl. *tinzar*	√*n-z-r*
61b.					*aḫanfuf*^{Ma}			√*ḫ-n-f-f*
61c.						*ahenšūš*, pl. *ihenšūšen*		√*h-n-š-š*
61d.							*taγenžuṛt*	√*γ--n-g-r* cf. SB **Hangūr*
62a. not	*we = wə-wəl*	S 716, M 19 Mil	*(u(r)) .. š*		E *ur*^{Ma}		*u(r) & wer*	√*w-r*
62b.					W ul^{Ma}	ūl		Ar
63a. one	*íǧen* *íǧǧen*	S 715-16 P 416	*iǯen* *iǯet*	*ižžən*^{Mil} *ižžen*^{R}	*yiǧǧ*^{B} *išt*^{Ma}	-	*yiwen* *yiwet*	√*y-w.n/t*
64a. person	*mídden* pl.	M 90					*medden* pl.	√*m+d+n*
64b.						*ariā̈z*, pl. *iryāzen*		√*r-g-z*
64c.							bnadem	Ar
65a. rain n.	*d-anzar*	Mil	*änzër*, pl. *inzaren*	*ánẓaṛ*				√*m-z/ẓ-r*
65b.					*tametena*^{Ma}			
65c.					*ənnúgg*^{w}*ət'*, pl. *nnwawi*^{AB}			?√*n-w*
65d.						*amān* = 94		√*(y)-m*
65e.							*ageffur*, pl. *ig*^{w}*efran*	√*g-f-r*
65f.							lehwa	Ar
66a. red	*azgaγ*	Mil	*azuggeγ*	*azzuγγâγ*	*azuggaγ*^{Mil} *azuggwaγ*^{Ma} *zəggwáγ*^{AB} : v. *zwiγ*	*azúgg*^{w}*aγ*	*azegg*^{w}*aγ*	√*z-w-γ*
67a. road	*ábrid*	M 104	*abrid*, pl. *ibriden*	*abriḍ*^{Mil} *abridh*^{R}	*abrid*^{Ma}, pl. *ib'rid'en*^{AB}	*abrīδ*, pl. *ibrīδen*	*abrid*, pl. *ibredan*	√*b-r-d*
67b.							amḍiq, pl. imḍiqen	Ar √*ḍ-y-q*
67c.							adriq	Ar *ṭariq*
68a. root			*azer*, pl. *izuren*		*azwer*, pl. *iẓuran*^{Mil}	*azweṛ*, pl. *izůwṛān*	*azaṛ*, pl. *iẓuṛan*	√*z/ẓ-w-r*
69a. round					*knunneḍ*^{AB}		*ak*^{w}*ernennay*	√*k-r-n-n*
69b.					*tönned*^{Ma} *ttənnḍən*^{AB}			
69c.					imduwər	-	imdewwer	Ar
70a. sand					*iždi*^{Mil} *igidi*^{Ma}		*iždi*	√*g-d*
70b.	*išal*	Mil						√*k-l*
70c.					remel^{Ma}	errěmel	erṛmel	Ar
71a. say	*yənná* *yəMMá*	M 4: he says M 4: he said			*inna*^{Ma} *ini* : *inna*^{AB}	*îni*	*ini*	√*-n*
71b.	*ámlaγ*	M 14: I shall say	*emmel*	*aməl*^{Mil} *amel*^{R}				√*m-l*
71c.							*siwel* : *awal* word	√*w-l*
72a. see	*(a)zrid*	M 19	*zri*	*zer*^{R}	*zər = izra*^{M} *ẓəṛ*^{AB}	*zer*	*ẓeṛ*	√*z-r*
72b.			rqeb					Ar
72c.							*wali*	√*w-l*
72d.							dill	Ar
73a. seed	*izzu*	Mil						
73b.					əzzərri^{C}t'		zzeri^{C}a	Ar
74a. sit	*g(a)*^{C}*məz*	M 58			(*t'əǧə*^{C}*məz* to sit without touch of earth)			
74b.	*iqqim*	Mil	*qim*		*qim*^{Mil} *qqim*^{AB} *iekkim*^{Ma}	*qqîm*	*qqim*	√*γ-y-m*
75a. skin	*áglim*	M 37, 38	*aglim*, pl. *iglimen*	*aylim*^{Mil}	*aglim*^{AB}, pl. *iglimən*	*aǧlīm*, pl. *iǧlimen*	*ag*^{w}*lim*, pl. *ig*^{w}*elman*	√*g-l-m*

75b.	tqášri	M_{57}, 88					iqʷcer, pl. iqʷecran = 3	Ar
75c.						abettān		Ar
76a. sleep	*əṭṭáṣ*	M 90, 91	*eṭṭes*		*ieṭṭos*^{Ma} *əṭṭs*^{AB}	*eṭṭès*	*eṭṭes*	√*-ṭṭ-s*
76b.					*gwən*^{Mil}		*gen*	√*g-n*
76c.					*innuddəm*^{AB}			√*n-d-m*
77a. small			*amuzzian*		*amzian*^{Ma} *aməzzyan*^{AB}	*amzian*	*amezyan imzi* v.	√*m-z/z-y* < √*m-z-k(-y)*
77ab.	*ameškun*	S > K #682		*taməškənt* n				√*m-[z]-k*
77c.					*agilal*^{Ma}			√*g-l-l*
78a. smoke n.					dhan^{Ma}	ddeḥān		Ar
78b.							*abbu*	√*b*
79a. stand	*ibədd abeddi*	Mil S > K #248			*iḇəddᵃ*^{AB}	*bedd*	*bedd*	√*b-d-d*
79b.						*ekker*		√*k-r*
80a. star	*itrī*	P 415	*itri*, pl. *itran*		*iθri*^{Mil} pl. *iθren*^{Ma}	*iθri*, pl. *iθrān*	*itri*, pl. *itran*	√*t-r*
81a. stone	*iḏyáyən* pl. *iḏyáyən* pl.	M 76 M 85		*iḏyagən*			*aḏyay*, pl. *iḏyayen*	√*d-y-y*
81b.			*taseṭṭart*, pl. *tiseṭṭarin*					√*s-ṭṭ-r*
81c.			*tmussayt*^{Mil}					√*m-s-y*
81d.					*ahadir*^{Ma}			
81e.					*t'a ẓrůt'*^{AB}, pl. *t'iẓrå*	*azrů*		√*z/ẓ-r-w*
81f.					*ab'ərḍål*, pl. *ib'ərḍələn*			√*b-r-d-l*
82a. sun	*tăfuyt tfut*	S > K #576 Mil	*tfuit*		*θafuθ*^{Mil} *t'afukt'*^{AB}	*θfůχθ*	*tafukt*	√*f-k*
83a. swim					-	ᶜawem	ᶜum	Ar
84a. tail			*atagguž*		-	-		
84b.							*tamyilt*, pl. *timyilin*	√*m-y-l*; ?Ah pl. *imellway*
84c.							*ajeḥniḍ*, pl. *ijeḥnaḍ* < ?	
84d.							aẓeᶜk'uk', pl. iẓeᶜk'uk'en	Ar
85a. that .	*wuh wuddin*	M 10 Mil			*win*^{Mil}	*wîn* : *θîn* pl. *yînîn*	*wahin* : *tahin*	√*w/t/y-h-n*
85ab.			*udai* : *teddai*					√*w/t-d-y?*
85bc.					*d'agwi*^{Ma}			
86a. this	*wuh wahanit*	M 10 Mil	*wai* : *tai*			*wa* : *θa* pl. *y/θîna*	*wa* : *ta*	√*w/t/y-h(-y)*
86b.					*ay, ayyi*^{Mil}			√*y?*
86c.					*netta*^{Ma}			√*n-t?*
87a. thou	*šek* m. *šem* f.	S_{68}, 446	*šek šem*	*šákki* = *kečᴿ čemmiᴿ*	*šəkk*^{AB} *šəm*^{AB}	*šekk šemm*	*keçç kemm*	√*k-y--k* √*k-y--m*
88a. tongue	*íləs*	M_{57}, 86	*ils*, pl. *-awen*		*ilas*^{Mil} *iles*^{Ma}	*īlēs*, pl. *ilsawen*	*iles*, pl. *ilsawen*	√*l-s*
88b.				*láywət*				Ar
89a. tooth	*ásinn*	M_{57}, 86	*isin*, pl. *-en*					√*s-n*
89b.			*uglan*				*ugel*, pl. *uglan*	√*g-l*
89c.					*tiymest*^{M}, pl. *θiymas*^{Mil}	*θiymest*, pl. *θiymās*	*tuymest*, pl. *tuymas*	√*y-m-s*
89d.					*tiserf*^{Ma}			√*s-r*
90a. tree	(ə)ššjəR	M 7			tašširt'^{AB}, pl. tišširin, coll. ssžər		ttežra	Ar
90b.					uḫelif (*oak)			Ar
90c.						*azqqŭr*, pl. *izeyrān*		√*s-y/qq-r* cf. #20 dry
91a. two	*sənn*	M 30	*sen* : *senet*	thinᴿ	*sən*^{Mil} *sen*^{Ma}	*sén*	*sin* : *snat*	√*s-n-y*
92a. walk	*yəflá*	M 25: he went						√*f-l*

92b.			*enneṭ*					√*n-ṭ*
92c.	*ugur* *iggur*	S > K #630 Mil			*ugir*^{AB} imp. *iugir*^{Ma}	*uğğūr*		√*-ww-r?*(NZ III, 854-55)
92d.					*aššaw*^{AB} imp.			cf. √*s* #16
92e.					rwaḥ^{AB} imp.			Ar
92f.							*ddu*	√*d*
92g.							*glu*	√*g-l* (NZ III, 767-68)
93a. warm	*iskəas*	Mil						√*k-(H-)-s*
93b.			iaḥma		iḥma		aḥmayan	Ar
93c.					*ḍel-woheuẓ*^{Ma}			
94a. water	*áman*	P 415	*amān*	*āman*	*aman*$^{Mil = AB}$	*aman*	*aman*	√*(y)-m*
95a. we	*nešnîn* *nášnin*	S_{88}, 446 M 76	*šnini*	*neššin*^{R}	*nəčənin*^{Mil} *nəšnin*^{AB}	*nešni* m. *neššenti* f.	*nekʷni* m. *nekkʷenti* f.	√*n-k-n*
95b.				náhnu				Ar
96a. what	*mátta*	M 19	*mai, ma*		*matsa*^{Mil} *mata*^{Ma}			√*m(-y/t)*
96b.							amecb'eđ	Ar
97a. white	*mállal*	M 55	*amellāl*	*aməllāl*	*amellal*^{Ma} *aməllal*^{AB}	*amellal*	*amellal*	√*m-l-l*
98a. who	*MəMMa*		*mai, ma*		*mən*^{Mil}			√*m(-n/y)*
98b.					*wi*^{AB}		*wi / wu*	√*w*
99a. woman	*tamĕṭṭût* *tamáṭṭut*	P 415 M_{57}, 90	*tamaṭṭut*	*tamáttoṭ* *tameṭṭuth*^{R}	*tameṭṭôt*^{Ma} *t'amaṭṭût'*^{AB}	*θamṭṭuθ*	*tameṭṭut*	√*m-ṭṭ*
99b.	*tisednan* pl.	M 112	*tisednan*	*tisədnân*	*tisedenan*^{Ma} *tisədnan*^{AB}	*θiseδnān*		√*s-d-n*
99c.							pl. *tilawin* & *tulawin*	√*l(-w)*
100a. yellow	*áwray*	M 5			*auray*^{Ma} *awraγ*^{AB}	*auray*	*awṛay*	√*w-r-γ*
100b.				ilaṣfar = 100				Ar

AB = A. Basset 1961; B. Men. = Beni Menasser; L. Lallwort; Ma = Masqueray 1879; Mil Militarev; R René Basset.

Wordlist B

gloss	Tašelhait	Tamazight	Beni Snus	Rif	Figig	Wargli	Mzabi	origin
1a. all	kul(lu)	kul, šul	ĕlkʷull	^{Iz}elkull	kul	kull	kull	Ar
1b.							*ašš*	√*-kkʷ*
1c.		^{P}qaḥ		^{Iz,Bq}qa^{C}	qa^{C}		ga^{C}	Ar
1d.					žžber			Ar
1e.							*aytulu*	√*y-t-l*
2a. ashes	*iγed*	*iyed*	*íyeδ*	^{Sc,Iz,Ur,Tz}*iγeđ*	*iyed*	*iyəd*	*iγəd*	√*γ-d*
2c.				^{Iz,Ur,Tz}*t'nifest*				√*n-f-s*
3a. bark						*tifrit*, pl. *tifray* = #46	(*tifrit*, pl. *tifray* leaf)	√*f-r-y*
3d.	elqehert, leqšoret	elqehert, leqšoret ^{P}aqšur	aqšŭr	^{Ur,Bq,Am}aqšur	(taqcurt peau de grenade)			Ar
3e.				^{Am,Bq}t'ḥašit'				Ar
3f.							*tara*	√*r*
4a. belly	St*adis*, pl. *idusan*	*adis*, pl. *idusan* ^{PC}*əddis*	*a^{C}ăddīs*, pl. *t^{C}ăddīsen*	^{Iz,Ur}*a^{C}addis*	*tadiss*, pl. *tidisin* & *tideswin*	*a^{C}əddis*	*a^{C}əddis*, pl. *t^{C}əddas*	√^{C}*-d-s*
4e.	aḥlig, pl. iḥelgan							Ar
4f.			*θa^{C}ăbŭṭ*, pl. *θi^{C}ăbbŭṭĩn*					√^{C}*-b-ṭ*
4g.				(*adan*, pl. *–en* intestines)		*adan*	*adan*, pl. *adanən*	√*(w)-d-n*
5a. big	*imeqqoren*	*imeqqoren*	*áměqqrān* *imĕqqranen*	^{Iz,Bq,Tz,Am}*amoqran*	*ameqqran*	*aməqqran*	*aməqqəran*	√*m-qq-r*
5d.					lqudert			Ar
6a bird	*agḍiḍ*, pl. *igḍaḍ*	*aẓḍiḍ*, pl. *iẓḍaḍ*	*aẓḍeḍ.aẓδeḍ* pl. *iẓŭḍāḍ*	^{Iz,Tz,Bq,Ur}*aẓḍ'iḍ'*	(*aẓḍiḍ*, pl. *iẓḍiden* gamin)	*aẓḍiḍ*, pl. *iẓuḍaḍ*	*aẓḍiḍ*, pl. *iẓuḍaḍ*	√*g-d-ḍ*
6c.				^{Sc}afruḥ	(afrux young bird)			Ar
6d.					ttir, pl. ttuyur			Ar

6e.					*abeṛḍal*, pl. *iberḍalen*			√*b-r-ḍ-l*
7g. bite	*ešš*	*eč* = ^{P}*čč*						√*k-s* = #23
7d.		^{P}*qqəs*						√*-qq-s*
7h.			*ezäᶜäf*	^{Iz,Tz}*ezᶜaf*				√*z-ᶜ-f*
7i.				^{Ur,Am}*eddem*				√*-d-m*
7j.				^{Bq}*berrem*				√*b-r-m*
7k.				^{Se} *ᶜaṭš*				
7l.					*ntər*			√*n-t-r*
7m.						*əddəd*	*kəddəd*	√*(k)-d-d*
8e. black	*iseggan* = St*asggän*					0		√*s-ww*
8f.		*iḍlan*						√*ḍ-l*
8g.		*aḥebšan*						
8c.		*ibeχχan* ^{P}*abaršan*	*beršen*	^{Se,Bq,Am,Ur} *aberkan*	*abercan*, pl. *ibercan*		*abərčan*	√*b-r-k*
9a. blood	*idammen*	*idammen*	*iðammen*	^{Iz,Ur,Tz} *id'ammen*		*idammən*	*idammən*	√*d-m*
10a. bone	*iɣess*, pl. *iɣsan*	*iyess*, pl. *iɣsan*	*iyěs*, pl. *iɣssān*	^{Iz,R}*iyes*	*iyess*, pl. *ixsan*	*iyəs*, pl. *iyəsan*, *ixsan*	*iyəs*, *ixs*, pl. *ixsan*	√*γ-s*
11a. breast	*if*, pl. *iffan*	*if*, pl. *iffan*	*ifĕf*, pl. *ifĕfān*		*iff*, pl. *-an*	*iff*, pl. *iffan*		√*f-f*
11b. poitrine	*idmaren*		*aðmer*, pl. *iðmāren*	^{Iz,Ur,Bq} *id'mären*			*idmarən*	√*d-m-r*
11f. poitrine		*esseḍer*						√*s(+/-)ḍ-r*
11dd.				^{R,Se} *abbiš*				√*-bb-C*
11d.		*bubba*, pl. *ibubbaten*			*buppu*			√*b-bb*
11g.							*zizi*	√*z-z* onom.
12j. burn	*eždər* = ^{P}*žděr*							?√*z/s-d-r*
12a.		*aɣ*	*erɣ*		*ssreɣ* : *ṛeɣ* to be burnt	*ərɣ*	*ərɣ*	√*r-γ*
12j.		*essir*						√*s-r*
12k.		*ekmoḍ* = ^{P}*kməḍ*		^{Iz} *ekmėḍ*				√*k-m-ḍ*
12l.		^{P}*ɣus* intr.						
12m.				^{Tz}eqd'a < Ar √*w-q-d*				Ar
12c.							*əzləf*	?Ar
12e.		ehreg		^{Iz,Se} ehraq			*əhrəq*	Ar
13a. claw	*isker*, pl. *askaren*	*iššer*, pl. *aššaren* = ^{P}*aššər*	*iššer*, pl. *aššären*	^{Iz} *iššer*	*iccer*, pl. *accaren*	*aššar*, pl. *-ən*	*aššar*, pl. *-ən*	√*s-k-r*
13b.		axbaš						Ar
14ab. cloud		*asegna*, pl. *isogna* = ^{P}*isəgnəw*		^{Ur,Am} *asegnu*	*asinew* coll.			√
14a.					(*tižnewt*, pl. *tižnaw* rainy cloud)		*tažniwt*	√*g-n-w*
14d.		^{P}*tagʷutt* #78	*θäiyūθ*, pl. *θiyūθīn*	^{Ju} *θaiyuθ*				√*b*
14e.	*amedlu*, pl. *imedla* = St*amḍlḥu*, pl. *imḍlḥån* :							√*ḍ-l* cf. Šilha *ḍ-l* einwickeln (Stumme)
14c.						*ɣəmməm* v.		Ar
15a. cold	*isemmeḍen*	*isemmeḍen*	*aṣemmāḍ*, pl. *iṣemmaḍen*	^{Iz,R,Se} *asemmiḍ*	*ṣmeḍ* v.	*asəmmaḍ*	*asəmmaḍ*	√*s-m-ḍ*
15d.				^{Se} *aźarṭit*				
15c.					bred v.			Ar
15e.							*ağris*	√*g-r-s*; cf. Ah *tağrest*
16b. come	*ekk*							√*k*
16c.		*edud* = ^{P}*ddu* go + *d* near						√*d*
16a.	*aṣked* = St*äšk*		*äsed*	^{Iz,Ur,Se} *as(ed)*	*as*	*as*	*as*	√*s*

16d.							*əyya!*	√*y*
17a. die	*emmet*	*emmet*	*emmeθ*	Iz,R,Se*emmet*	*mmet*	*mmət*	*əmmət*	√*-m-t*
18a. dog	pl. *iḍan*	*aïdi*, pl. *aïḍan*	*aiδi*, *aiḍi*, pl. *ïiδ/ḍān*	Iz*aid'i*	*aydi*, pl. *iyḍan*	*aydi*, pl. *iyḍan*	*aydi*, pl. *iydan*	√*y-d*, pl. √*y-ḍ+n*
18b.	*ikzin*							√*q-z-n*
19a. drink	*seow*	*seow* = P*səw*	*sû*	Iz,R,Se*su*	*sew*	*səw*	*səw*	√*s-w*
20a. dry	*iqqoren*	*iqqoren*	*qār*, p.p. *iqūr*	Iz,Ur,Tz,Am *eqqur* v.	*ameqquṛ* : *qqaṛ* v.	*yəqquṛ* v.	*yəqquṛ* v.	√*-q-r*
20c.		*ibesen*						√*b-s*
20d.				Ju*iuzeɣ*				√*z-ɣ*
20e.						ənšəf	ənšəf v.	Ar
21a. ear	*ameẓẓor*, pl. *imezgan*	*ameẓẓoɣ*, pl. *imeǰǰan* = P*amәzzuɣ*	*θimdžet*, pl. *θimdžīn*	Iz,Se,Ur,Tz *amezzuɣ*	*ameẓẓuɣ*, pl. *imeẓɣan*	*tamәžžit*, pl. *timežžin*	*tamәzzuxt*, pl. *timəzgin*	√*m-z/ẓ-ɣ*
22a. earth					(*tamurt*, pl. *timuṛa* pays : *amur* part)	*tamuṛt*, pl. *timuṛa*	*tamuṛt*, pl. *timuṛa*	√*m-r*
22b.	*akal*	*akal* = P*ašal*	*šāl*	Se*kal*	*cal*			√*k-l*
22c.				Se*takka*				
22d.							*taɣuṛi*	√*ɣ-r*
23a. eat	*ešš*	*eč* = P*čč*	*etš*, *ětč*	Iz,Se,Ur,Bq,Am *etš*	*tec*	*əšš*	*əšš*	√*k-s*
23b. habit.			*tett*		*tett*	*yəttət*	*yəttətt*	√*t-t*
24b. egg	*taglaït*, pl. *tiglaï*	*tajlaït*, pl. *tijlaï*						√*g-l-y*
24a.			*θamellālt*,pl. *θimellālīn*	Iz,Tz,Ur,Bq *t'amellālt*	*tamellalt*, pl. *timellalin*			√*m-l-l*
24c.				Se,Am *t'agfilt*				√*g-f-l*
24d.						*tamḍərt*, pl. *timəḍrin*	*tamḍərt*, pl. *timəḍrin*	√*m-ḍ-r*
24e.							*tazdəlt*, pl. *tizdal*	√*s+d-l*
25a. eye	*tiṭ*	*tiṭ*	*θēṭ*, ann. *ṭēṭ* pl. *θiṭṭawin*	Iz,R,Se *t'iṭ*	*tiṭṭ*, pl. *-awin* & *aṭṭaw*	*tiṭṭ*, *-awin*	*tiṭṭ*, *-awin*	√*ṭ* < ?√*l.t*
25ab.	pl. *allen*	pl. *allen*		pl. Se*iwajen* AA*allen*				√*l*
26a. fat n.	*tadunt*	*tadunt*	*θäδūnt*	Iz,Se,Bq,Am,Tz *t'ad'unt*	*tadunt*	*tadunt*, pl. *tiduna*	*tadunt*, pl. *tiduna*	√*d-w-n*
26d.						lidam		Ar
27a. feather	tarrišt, pl. erriš	errišet, pl. errišat	ĕrrîš		rric	rrišət		Ar
27d.	St*iberž*, pl. *iberžžn*							
27e.						*tbulbult*, pl. *tibulbulin*	*tbulbult*, pl. *tibulbulin*	√*b-l-b-l*
28a. fire	elC*afit*	lC*afit*	lC*afīθ*		lC*afeyt*	ləC*fit*		Ar < B?
28d.		*takat*						√*k*
28e.		ennar						Ar
28b.							*tfawt* : *ifaw* be clear	√*f-w*
28c.			*θimssi*	R,Se*t'imessi*	(*timsi* fièvre)	*timsi*	*timsi*	√*m-s*
29c. fish	*aslem*, pl. *iselman*	*aslem*, pl. *iselman*	*aslem*, pl. *islemen*	Iz,Se *aslem*	*aslem*, pl. *iselman*			√*s-l-m*
29d.						lhut	əlhut	Ar
30a. fly v.			*ăfiy*	Iz*afey*				√*f-y/g*
30b.	*ferr*	*efru* = P*afrəw*			*fferfer*	*afər*, *ffərfər*	*ffərfər*	√*f-r*
30c.				R*ėḍ'wa*				
31a. foot	*aḍar*, pl. *iḍaren*	*aḍar*, pl. *iḍaren*	*ḍār*, pl. *iḍárren*	Iz,Se,Ur,Bq,Am *ḍ'ar*	*ḍar*, pl. *iḍaṛen*	*ḍar*, pl. *iḍarən*	*ḍar*, pl. *iḍar(r)ən*	√*ḍ-r*
31b.							*tins-i*, pl. *–a* animal f.	√*-n-s*
32a. full			*etšār*, p.p. *itšūr*	*d'kar* v.	*ṭcaṛ* v.	*yəššuṛ* v.	*yəššuṛ* v.	√*ḍ-k-r*
32b.	*idemmeren*							√*d-m-r*
32c.		*imlan*						√*m-l*
32d.		PC*əmmər*						Ar
33a. give	*efk*	*uš*	*ûš*	Tz,Ur*uǩš*, Se*ekk*	*wec / uc*	*uš*	*uš*	√*k-f*

34a. good			*yelha*					√*l-h*
34h.			awaḥði					Ar
34i.				Iz*d'ilfen*				
34c.				Iz*d' usbiḥ*	usbiḥ			Ar
34j.				Tg*mezian*				Ar
					umliḥ			Ar
34e.		i[C]elen (see Mil$_{91}$ 262) = P*izil*						?Ar
34k.		P*yudu*						√*γ-d*
34l.	i[C]delen							Ar *[C]adl* correct
34m.		iheyyan						Ar *hayyi'* be nice
34b.						əbha		Ar
34n.							*amək*	
34o.							əsləh	
34p.							wata	
35a. green	*azegzaw*	*azegzaw*	*äzīza*	Ur,Bq,Am *azegzau*	(*aziza* blue)	*azizaw*	(*azizaw* blue-green)	√*z-w-z-w*
35b.					*adal*, pl. *idalen*	(*dal* dark)	*dal*	√*d-l*
36. hair	*azzar*, pl. *-en*	*azzar*, pl. *-en*						√*-z-r*
36a.						*zaw*	*zaw*	√*z-w*
36b.				R*anzəḍ'*				√*m-z/ẓ-ḍ/d*
36c.			*zäf*, pl. *izaffen*	Iz*azäf*	*zaff*, pl. *izaffen*	*zaff*, pl. *izaffən*	*zaff*, pl. *izaffən*	√*z-f*
37a. hand	*afus*, pl. *ifassen*	*afus*, pl. *ifassen*	*fūs*, pl. *ifāssen*	Se*afus*	*fus*, pl. *ifassen*	*fus*, pl. *ifassən*	*fus*, pl. *ifassən*	√*f-s*
38a. head	*ixf*, pl. *ixfawen*	*iy(e)f*, pl. *iyfawen*	*iḥf*, pl. *iḥfawen*	Iz,Ur,Tz *iḥf*	*ixef*, pl. *ixafen*	*iyəf*, *ixf* pl. *-awən*	*iyəf*, *ixf* pl. *-awən*	√*γ-f*
38c.	*agayu*, pl. *iguya*							√*g-y*
38b.			*aqůrru*, pl. *iqůrrūyen*					√*q-r*
38d.			*aqélqůl*		*aqelqul*, pl. *iqelqal*			√*q-l-q-l*
38e.			*azellīf*, pl. *izellāf*	Iz*azellif*				√*z-l-f*
39a. hear	*sel(l)*	P*səl*	*sél*	Se*essel*	*sell*	*səll*	*səll*	√*s-l*
39b.		*sfeld*						
39c.		esme[C]						Ar
40a. heart	*ul*, pl. *ulawen*	*ul*, pl. *ulawen*	*(w)ûl*, pl. *ûlawen*	Iz.Se *ul*	*ul*, pl. *ulawen*	*ul*, pl. *ulawən*	*ul*, pl. *ulawən*	√*w-l*
40b.						lkəbdət		Ar
41a. horn	*isk*, pl. *askiwen*	*iš*, pl. *aššiwen* = P*išš*	*išš*, pl. *iššawen*	Se*isk*		*aššaw*, pl. *aššawən*	*aššaw*, pl. *aššawən*	√*-s-k*
41b.					aqellu[C], pl. iqelwa[C]			Ar
42a. I	*nekkin*	*nikkin* = P*nəkk*	*netš*	Iz*neč*, Se*nekk* R*nešš*	*net(t)c*	*nəšš*	*nəšš*	√*n-k*
43a. kill	*eny*	*eny* = P*nəy*	*ěny*, h. *neqq*	Tz,Ur,Bq *ney*	*ney*	*nəy*	*nəy*	√*n-γ*
43b.		egtel						Ar
44a. knee	*afud*, pl. *ifadden*	*afud*, pl. *ifadden*	*fūd*, pl. *ifadden*	Se*afud*	*fud*, pl. *ifadden*	*fud*, pl. *ifudan*	*fud*, pl. *ifaddən*	√*f-d*
44b.		errekobt						Ar
45a. know	*essen*	*essen* = P*isin*	*essen*	Iz,R,Se *esn*	*ssen*	*əssən*	*ssən*	√*-s-n*
45b.		e[C]ref						Ar
46a. leaf	*ifer(r)*, pl. *ifrawen*	*ifer(r)*, pl. *afriwen*	(pl. *ifriwen* young leaves)	Se*afar*	(*afeṛ* feuille de chou)	*tifrit*, pl. *tifray* = 3	*tifrit*, pl. *tifray*	√*f-r(-y)*
46b.		tawriqt	luerq coll.		lewerq coll.			Ar
47b. lie			*ieṭṭes*	Iz,R,Se *eṭṭaṣ*		*əṭṭəs*	*əṭṭəs*	√*-ṭṭ-s* =76
47f.	*(e)gen*	*žen*						√*g-n*
47a.			*ezzel*	Iz,Se *ezzal*				√*z-l*
48. liver	*tasa*, pl. *tasiwin*	*tasa*, pl. *tasiwin*	*tsa*, pl. *tisawin*	Se*t'asa*	*ttsa*	*tsa*, pl. *tisawin*	*tsa*, pl. *tisawin*	√*s*
49a. long			*azirār*	Ur,Bq,Am *azegrar*	*aṛaṛ*	*azəgrar*	*azəğrar*	√*z-g-r-r*
49b.	*iyezzifen*	*ayəzzif*						√*γ-z-f*

49c.		itewelen			tal			Ar
50a. louse	*tilkit*, pl. *tilki(ti)n*	*tillišt*, pl. *tilišin, tillaš*	*θiššiθ*, pl. *θiššīn*	Bq *θiššiθ*	*tilleyt*, pl. *tilcin*	*tillit*, pl. *tilšin*	*tillit*, pl. *tilšin*	√*l-k*
51a. man	*argaz*, pl. *irgazen*	*argaz*, pl. *iregzen* = P*aryaz*	*árgāz*, pl. *irgāzen*	Ur,Bq,Am*argäz*	*argaz*, pl. *irgazen*	*argaz*, pl. *irgazən*	*arğaz*, pl. *irğazən*	√*r-g-z*
51e.			läðämi, pl. bnäðem					Ar
51f.							aterras	Ar
52b. many	*eggutenin*							√*g(-t)*
52k.		C<u>eddanin</u> = P C<u>əddu</u> v.						Ar
52l.			yûsā C					Ar
52m.				Se*bezzāf*	*bezzaf*			√*b-z-f*
52n.				Iz*erru*				
52i.				Tz*attas*	*aṭṭas*			√*ṭ-s*
52o.							*walu*	√*w-l*
52p.				Iz<u>qbāla</u>		uyləb	yəyləb	Ar
52q.					lbala, pl. lbalawat			Ar
52r.				AN<u>šella</u>				Ar √C*-l-h*
52s.				Ur<u>dunnit'</u>				Ar √*d-n-*C
52t.					amrellah			Ar
53a. meat		*agsum* = P*aksum*	*aysûm*	Am*aksum*	*aysum*	*aysum*, pl. *iyəsman*	*aysum*	√*k-s-m*
53b.	*tifeyyi* = St*tifíi & tifiú*							√*f-y*
53c.					*taqedditt* : *qedded* tailler de pieces			√*q-d-d*
54a. moon			(*θäzīri* moonlight)		(*tziri* clair de la lune)	*taziri*	*taziri*	√*z-r*
54b.	*ayyur*	*ayyur*	*yůr*	Se*ayur* Bq *'iur*	*yur*, pl. *iyuren*	(*yur*, pl. *iyarən* new moon)	(*yur*, pl. *iyarən* new moon)	√*y-r*
55a. mountain	*adrar*, pl. *idraren*		*äðrār*, pl. *iðūrār*	Ju*ad'rar*, pl. *id'urar*	*aḍraṛ*, pl. *iḍraṛen*			√*d-r-r*
55b.		C<u>ari</u>, pl. lC<u>wari</u>						Ar
55c.		P<u>žžbəl</u>						Ar
55d.						*agərgub*, pl. *igərgab*		√*g-r-g-b*
55e.					(*tawrirt* big stones)		*awrir*, pl. *iwrirən*	√*w-r-r*
56a. mouth	*imi*, pl. *imawen*	*imi*, pl. *imawen*	*īmi*, pl. *imawen*	Iz, Se *imi*	*imi*, pl. *imawen*	*imi*, pl. *imawən*	*imi*, pl. *imawən*	√*m*
56aa.				R*aqemmum*				
56b.						*admuy*, pl. *idmuyən* (+ groin, gueule)		
57a. name	*isem*, pl. *ismawen*	*issem*, pl. *issmawen* = P*ism*		Iz,R,Se *ism* (< Ar?)		*isəm*, pl. *ismawən*	*isəm*, pl. *ismawən*	√*s-m*
57b.			lîsěm, pl. lesmawāt		lasem, pl. lasmawat			Ar
58a. neck				Iz,R*iri*		*iri*, pl. *irawən*	*iri*, pl. *irawən*	√*r*
58b.						*akrum*, pl. *ikrumən*		√*k-r-m*
58c.	*tamegreṭṭ*, pl. *timegraḍ*	*tamegreṭṭ*, pl. *timegraḍ* = P*amgərḍ*						√*m+g-r-ḍ*
58ce.			*ažernēḍ*, pl. *ižernāḍ*	Iz,Ur *ažarniḍ'*				√*g-r-n-ḍ*
58f.					*menjey*			
58d.				Se<u>el</u>C<u>onq</u>				Ar
58g.							*taylabit*, pl. *tiylabin*	√*γ-l-b*
59a. new	<u>uždid</u>, <u>leždid</u>	<u>uždid</u>	<u>ždeð</u>	Iz<u>d'edžd'id'</u>	<u>aždid</u>	<u>aždid</u>	<u>aždid</u>	Ar
60a. night		*iḍ*,	*ḗḍ*, *êḍ*,	Iz *iḍ'*	*iḍ*, pl.	*iḍ*, pl.	*iḍ*, pl.	√*b-ḍ*

		pl. *iḍawen*	pl. *iď'ďān*		*iḍan*	*iyḍan*	*iyḍan*	
60aa.	*tadaggat*, pl. *tidaggatin*					*dəggiḍ*		√*d-g* & √*ḇ-ḍ*
60b.				Iz ellilt	llilet			Ar
61a. nose		*tinzert*, pl. *tinzar* = P*tignzar*	*inzer*, pl. *inzār* & *θinzerθ*, pl. *θinzār*	Iz,Se,Bq,Am *anzār*	*funzer*, pl. *ifunzriten* & *anzaren* : *tinzert*, pl. *tinzar* narine	*tinzərt*, pl. *tinzar*	*tinzərt*, pl. *tinzar*	√*n-z-r*
61d.	*tinχert*, pl. *tinχar*							√*n-ḫ-r*
61bc.			*áḫenfūr*, pl. *iḫenfār*					√*ḫ-n-f-r*
61e.			ameḫšem, pl. imeḫšam					Ar
62a. not	*ur*	*ur*	*u, ūr*	Iz *ur .. š* Ur *ur .. min*		*u, wəl*	*u, wəl, wal*	√*w-r*
62b.					ul	ul		Ar
63a. one	*yan* m. *yat* f.	*yun & iǯ* m. *yut & išt* f.	*îdžen* m. *θîšt* f.	Se *yiwen & un* Tg *ian* m. : *iat* f.	*idžen* m. *yict/yicc* f.	*iggən* *iggət*	*iggən* *iggət*	√*y-w.n/t*
64a. person	*medden* pl.	*midden* pl.			(*midden* gens)	(*middən* gens)	(*middən* gens)	√*m+d+n*
64d.			ḫad					Ar
64e.					(*iman* soi-même)	pl. *iman*	(pl. *iman* soul)	√*m(-n)*
64c.		bənadəm	lāδāmi, pl. bnäδem	Iz,R,Se bnad'em	bnadem, pl. *id* bnadem	(lə)bnadəm	bnadəm	Ar
65a. rain n.	*anzar*, pl. *ineẓran*	*an□ur*, pl. *ineẓran*		Iz,R,Se *ānzār*		*amẓar*, pl. *imuẓar*		√*m-ẓ/z-r*
65g.			*θbîša, θbîxa*		*t-bca*, pl. *ti-bicaw*			√*b-k*
65h.					leɣdir			Ar
65i.							*tağniwt*	√*g-n-w*
66a. red	*azoggaɣ*	*azoggaɣ*	*azuġğ"aɣ*	*azugg"aɣ*	*aẓekk"aɣ*	*azəggaɣ*	*azəgg"aɣ*	√*z-w-γ*
66aa.		*amezgoaɣ*						
67a. road		*abrid*, pl. *iberdan*	*ábrīδ*, pl. *ibrīδen*	Iz,R *abrid'*	*abrid*, pl. *ibriden*	*abrid*, pl. *ibridən*	*abrid*, pl. *ibridən*	√*b-r-d*
67d.	*aɣaras*, pl. *iɣarasen*							√*γ-r-s*
67e.				Se *izerf*				√*z-r-f*
68a. root	*aẓur*, pl. *iẓuran*	*aẓur*, pl. *iẓuran*	*ázwer*, pl. *izuwrān*	Iz,Se,Bq,Am *azwar*	*aẓweṛ*, pl. *iẓewṛan*	*aẓur*, pl. *iẓuran*	*aẓur*, pl. *iẓuran*	√*z/ẓ-w-r*
69a. round			-			*kkərnunni* v.	*akərnənnay*	√*k-r-n-n*
69b.	i(m)deweren	Pamḍuwər = ittudeweren		Ju idwar	tadewwirt	imdəwwər	imdəwwər	Ar
69bb.	eddaret							Ar
69c.							*agnunnay*	√*g-[l]-n*
70a. sand				Iz,Ur,Tz *idži*		*iždi*	*iždi*	√*g-d*
70d.	*amlal*							√*m-l-l*; #97
70c.		erremel	errémleθ	Se errmèl	ṛṛemlet			Ar
71a. say		P*ini*			*ini*	*ini*	*ini*	√*-n*
71d.			*sedmer*					√*d-m-r*
71c.	*sawel* : *awal* word	*siwel* : *awal* word	*sîwel* : *awāl* speech	Iz,Se *siwel* : *awäl*	*ssiwel* : *awal* word			√*w-l*
72a. see	*ẓer*		*ẓér*	Se *ẓar*	(□ẹṛ visiter)	*ẓər*	*ẓər*	√*z-r*
72d.	*emnid*	*emnad*						√*m-n-d*
72e.		*ennuye* = P*annay*						√*-n-y*
72c.				Iz *wala*				√*w-l*
72f.				Am,Bq *naḍ'or*				
72g.				Am,Bq *ḫemm*				
72e.					*mmater*			√*m-t-r*
73b. seed	azra C	azerre C	ezzérri C *ǟθ*	-	zzəriri C *ət*			Ar
73c.	St *amud*							√*m-d*
73d.		P*ifsan*				*ayfəs*	*ayəfs*	√*y-f-s*
74c. sit	*sekkus* = St *skûus*							√*k-s*
74b.		*eqqim* =	*qim, éqqim*	Iz,R	*qqim*	*əqqim*	*əqqim*	√ *γ-y-m*

		^{P}*qqim/yim*		*qim, eqqim*				
74d.		*eggiwer*						
75a. skin		*aglim*, pl. *iglimen* = ^{P}*ag^{w}lim*				*aglim*, pl. *iglimen*	*ağlim*, pl. *iğlimen*	√*g-l-m*
75ab.	*ilem*, pl. *ilmawen*		*ilem*, pl. *ilmawen*	^{Iz}*ilem*	*ilem*, pl. *ilmawen*			√*-l-m*
75d.	St*asräi*, pl. *isräin*	*asraï*, pl. *israyen*						√*s-r-y*
75c.						tabəttant	tabəttant	Ar
76a. sleep			*eṭṭès*	*eṭṭaṣ* = 47	*ṭṭeṣ*	*əṭṭəs* = 47	*əṭṭəs* = 47	√*-ṭṭ-s*
76b.	*gon, gen*	*žen* = ^{P}*gən*						√*g-n*
76c.						*nnuddəm*	*ənnuddəm*	√*n-d-m*
77a. small	*meẓẓeyen*	*meẓẓeyen* = ^{P}*aməẓẓyan*	*am(ez)zyān*, pl. *imzyānen*	*meźźei*	*ameẓẓyan*		*iməẓẓi*	√*m-ẓ-y*
77d.						*akdid*	*akdid*	√*k-d-d*
77e.						*ikšišən*		√*k-s-s*
78b. smoke n.	*aggu*, pl. *aggiwen*	*aggu*, pl. *aggiwen*						√*b*
78a.			ḏ'ḏ'ûḥān		ddexxan, pl. ddxaxen	dduxxan	əddduxxan	Ar
78c.				^{Ju}*arbub*				√*r-b-b*
78d.							*awrasən*	√*w-r-s*
79a. stand	*bed*	*bed* = ^{P}*bədd*	*bedd*	^{Iz}*bedd*	*bedd*	*ibədd*	*ibədd*	√*b-d-d*
79b.	*ekker*	*ekker*	*ékker*					√*k-r*
80a. star	*itri*, pl. *itran*	*itri*, pl. *itran* *išri*, pl. *išran*	*iθri*, pl. *iθrān*	^{Iz,Se,R}*it'ri*	*itri*, pl. *itran*	*itri*, pl. *itran*	*itri*, pl. *itran*	√*t-r*
81a. stone						*aḏyay*, pl. *iḏyayən*	*aḏya*, pl. *iḏyayən*	√*d-γ-γ*
81f.	St*taggunt*, pl. tant. *aggun*				*tayunt*, pl. *tiyuna*			√*b-n*
81e.	*azru*, pl. *izra*	*aẓẓru*, pl. *iẓẓra*	*θazrūθ* : *azru*, pl. *izerwān* rock	^{Iz,Bq,Am}*aźru*	(*aẓṛar* cailloux)			√*ẓ/z-r-w*
81g.		*isəlli*						√*s-l*
81h.			*θauqiθ*, pl. *θiuqay* : Wars. *θūqīq*	^{Iz}*auqi*				√*w-q-y*
81i.					*qabu*, pl. *iquba*			√*q-b*
81j.					aḥžur, pl. iḥužar			Ar
82a. sun	*tafukt*	*tafukt*	*θfuyθ*	*tafukt*	*tfuyt*, pl. *tafuyt*	*tfuyt*, pl. *tifuya*	*tfuyt*, pl. *tifuya*	√*f-k*
83a. swim	^{C}um	(s)^{C}um	*č^{C}ūm*	^{Am} ^{C}um	^{C}um	^{C}um	^{C}um	Ar
83b.				^{Iz,Se,Ur,Tz,Bq} eft'aḥ				Ar
84d. tail	Stašwal			^{Tg}ḥašuwal				Ar
84b.	*timyilt*, pl. *timyilin*	*timyilt*, pl. *timyilin*					*tamqalt*, pl. *timqalin*	√*m-γ/q-l*
84e.	*tabaççat*, pl. *tibaççatin*	*tabaççat*, pl. *tibaççatin*						
84f.		*eddil*						√*d-l*
84g.		^{P}*abərḍuḍ*						√*b-r-ḍ-ḍ*
84h.			*θagerbūzt*, pl. *θi...in*					√*g-r-b-z*
84i.			θa^{C}ánnābθ, pl. θi...īn					Ar
84f.			aδībů̄r, pl. iδībů̄ren					Ar
84g.				^{Iz}*abeḥrur*				√*b-ḥ-r-r*
84h.				^{Ur,Tz} *ašugg^{w}aḍ*				√*š-ww-ḍ*
84i.				^{Se}*azafal*				√*z-f-l*
84j.				^{Bq}*nafer*				√*n-f-r*
84k.				^{Am} *anuwar*				√*n-w-r*
84l.				^{Ju} *ašeṭṭab*				√*š-ṭṭ-b*
84m.					*tažlalt*, pl. *tižulal*			√*g-l-l*
84n.						*taẓəndidt*, pl.		√*ẓ-n-ḍ-ḍ*

						tizəndaḍ		
84o.						*ta^{C}əṭṭušt*, pl. *ti^{C}əṭṭušin*		√^{C}-*ṭṭ-š*
85a. that .	*γuan*	*ewan* ^{P}*wan* : *tan*	*win*	^{Iz}*win*	*wenn tenn*	*wən* : *tən*	*wən* : *tən*	√*w/t-n*
86a. this	*γuad*	*wad*	*wu*	^{Iz}*wu*; ^{R}*wa(ni)* ^{Se}*wad'a* m. : *t'u/t'a/t'ad'a*	*wu* : *tu*	*wu* : *tu*	*wu* : *tu*	√*w/t(-d)*
87a. thou	*keyin χemmin*	*šeggin šemmin*	*šekk šemm*	^{R,Iz} *šek* ^{Tg}*kedži*	*cekk cem*	*šəkk(in) šəmm(in)*	*šəčč šəmm*	√*k-y(-k)* √*k-m*
88a. tongue	*il(e)s*, pl. *ilsawen*	*il(e)s*, pl. *ilsawen* ^{P}*irs*	*îles*, pl. *îlsān*	^{Iz,Se} *ils*	*iles*, pl. *alsawen*	*iləs*, pl. *ilsawən*	*iləs*, pl. *ilsawən*	√*l-s*
89e. tooth	*taχost*, pl. *taχsin*, cf. *aχos*, pl. *oχsan*	*taγost*, pl. *toγγesin* cf. *ayos*, pl. *oγsan* molar ^{P}*uxs* tooth						√*γ-s*
89f.				^{Se} *aqarruš*				√*q/k-r-š*; cf. #7a
89b.						*ugəl*, pl. *uglan*	*uğəl*, pl. *uğlan*	√*g-l*
89c.		*taγmest*, pl. *tiγmas*	*tīγmest*, pl. *tīγmās*	^{R} *t'iγmest*	*tiγmess*, pl. *tiγmas* & *aγmasen*	*tiγməst*, pl. *tiγmas*	*tiγməst*, pl. *tiγmas*	√*γ-m-s*
90a. tree	essežret, pl. essežrat	essežret, pl. essežrat	sežžerθ, pl. séžžūr & θiseżrīn		ššəžṛət	ššəžərt	əssəğrət	Ar
90d.		^{P}*axlijj*						
90e.				*iγlef*				
90f.		^{P}*asəklu*		(^{Bq,Am}*asekṛu* big tree)				?√*s-k-l*
90g.				^{Bq,Am} elγars				Ar
91a. two	*sin sunt*	*sin* = ^{P}*sin sunt* = ^{P}*snat*	(*sén yirgâzen* 2 men)		*senn* m. *sent* f.	*sən* : *sənt*	*sənn* m. : *sənnət* f.	√*s-n*
91b.			θnâyen	t'nayn				Ar
92c. walk			*éyyūr*	^{Ur,Bq,Am} *uğur*	*(u)yur*		*iğuṛ*	√*-ww-r*
92f.	*eddu*	*eddu* = ^{P}*ddu*		^{Tg}*eddu*		*əddiw*		√*d-w*
92e.			rôh	^{R,Iz} rúh	rah			Ar
92h.						*əkk*		√*-k*
92i.						*iyya!*		√*y*
92j.							*əẓwa*	√*ẓ-w*
92k.				^{Se} sir			əsra	Ar
92l.					qsed			Ar
93b. warm	iḥman	iḥman	yeḥmān	^{Iz} eḥma	ḥma v.	əḥma	əḥma	Ar
93d.	*iryan*	*iryan*						√*r-γ*, #12a
93e.						ədfa		Ar
93f.							əsxən v.	Ar
94. water	*aman*	*aman*	*ámān*	^{Iz,Se,R} *amān*	*aman*	*aman*	*aman*	√*(y-)m*
95. we	*nekkeni* *nekkenti*	*nikni* = ^{P}*nukni* *nikkenti*	*ne(t)šnīn* *neššenti*	^{Se} *nekkni* ^{R} *neššin* ^{Iz} *nečin*	*necni*	*nəšnin* m. *nəšninti* f.	*nəšnin*	√*n-k-n*
96. what	*ma(t), matta mit*	^{P}*may*	*mäges*	^{Iz} *mäin*		*ma, matta*	*matta, b°*	√*m(-y/t)*
					wi(kk)			√*w*
97a. white	*imellulen*	*imellulen* = ^{P}*aməllal*	*amelläl*	^{Iz} *amelläl*	*amellal*	*aməllal*	*aməllal*	√*m-l-l*
97b.	St*amaziγ*							√*m-z-γ*
98a. who	*ma(t), matta*	^{P}*may*	*matta*	^{MC} *min*	*may*	*mammu*	*man-ay-u*	√*m(-n/y)*
98b.							*wi*	√*w*
99a. woman		*tameṭṭut*, pl. *timeṭṭat* & *timeṭṭutin*	*tamṭṭŭθ*	^{R,Iz} *t'amèṭṭŭt'*	*tameṭṭut*	*taməṭṭut*	*taməṭṭut*	√*m-ṭṭ*
99b. pl.		*tisednan*	*θiseδnān*	pl. *t'isednän*	*tizednan* *tisednan*	*tisədnan*	*tisədnan*	√*s-d-n*
99d. pl.		*taïči*						
99e.	*tamγart*, pl. *timγarin*			^{Se,Am} *t'amγart'*				√*m-γ-r*; cf. #5a
99f.				^{Iz} *twašunt*				√*k-n*
99g.					*zzukellu* arg.			

100a. yellow	*ireγen* = St*āūray*	*iwerreγen* = ^{P}*awray*	*iurāγen*	^{Iz,R} *auray*	*awṛay*, pl. *iwṛayen*	*awray*	*awray*	√*w-r-γ*

Abbreviations: B = A. Basset apud Kossmann 1999; L. Lallwort; M = Masqueray 1879; P = Penchoen 1973: Tamazight of the Ayt Ndhir; R = René Basset 1883; St = Stumme 1899. Special abbreviations for Rif: Iz Iznacen; R: Am Ammart, Bq Iboqoyen, Tz Tuzin, Ur Ait Uriaghel; Se Senhaja: AA Ait Ahmed, Tg Taghzut. Ju = Justinard 1926; MC = McClelland 2004.

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