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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 qualitative models of Aikhenvald (1987) and Kossmann (1999) are presented. The authors operate especially with phonological and morphological arguments. They both summarize their results in the block-diagrams.

A. Aikhenvald (1987, 39) calls 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 Semlal Tazerwalt Ntifa	Tamazight Ndir Izayan Zgugu Zemmur Mgild	Kabyle	Šawiya	Seghrušen	Rif Senhaja Iznasen	Snus Šenwa Figig Zekkara Menaser Ksurs Salah	Mzab Wargla Righ	Djerba Sened Zwara

Senegal, Mauritania
Zenaga

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

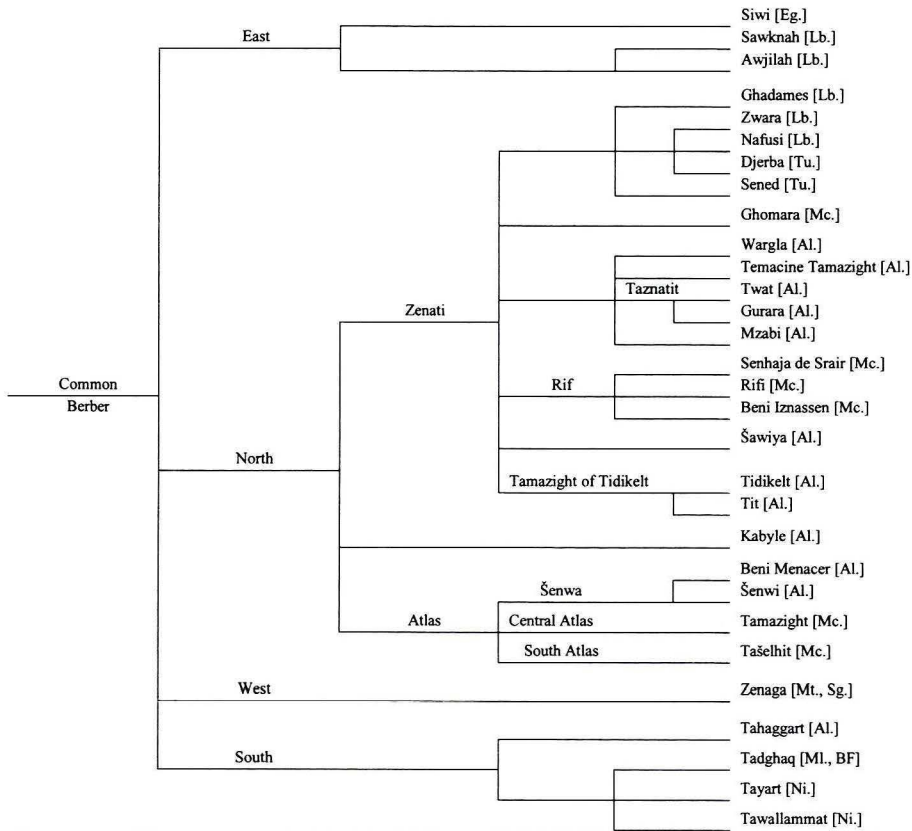
Burkina Fasso, Mali, Niger, South Algeria, South Libya	
South Tuareg Tayart Tamesgeret W+SAwlemmiden Taneslert	North Tuareg Ghat Ahaggar Tadghaq

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

Peripheral isolates:				
West Periphery	North Berber area			East Periphery
Zenaga	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 Fqaha Siwa
			South Berber = Tuareg	
				Ghadames Awjila

C. The model of the Berber classification reflecting a synthesis of traditional points of view appears in the latest 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).

On classification of Berber



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 Ajxenal'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, Ažžer (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, Tadhgaq (= Ifoghas; Plateau Adrar), Taneslemt; "Tamašeq": Ighauien, Imažoghen (= Iguhadaren), Ida u Sak (= Dausak) - in reality the Songhay dialect with Tamašeq loans.

3. West Berber branch

Zenaga (= Taddungiyah; Mauretania - Senegal).

4. North Berber branch

4.1 Atlas group:

a) Tašelhait (= Šilha): Tinduft, Ait Umbrided (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, lhahan, Imeghran, Ida u Tanan, Ida u Zikkí, Ida u Zal, Ntifa (High Atlas);

b) Tamazight (= Beraber): Ait Messad (region of Demnat); Ait Izdeg, Ait Yahya, Ait Sliman, Ait Khebbas, 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, Ikraen, Ait Said, Ait Itift 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-Yiraten, "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 almost 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.

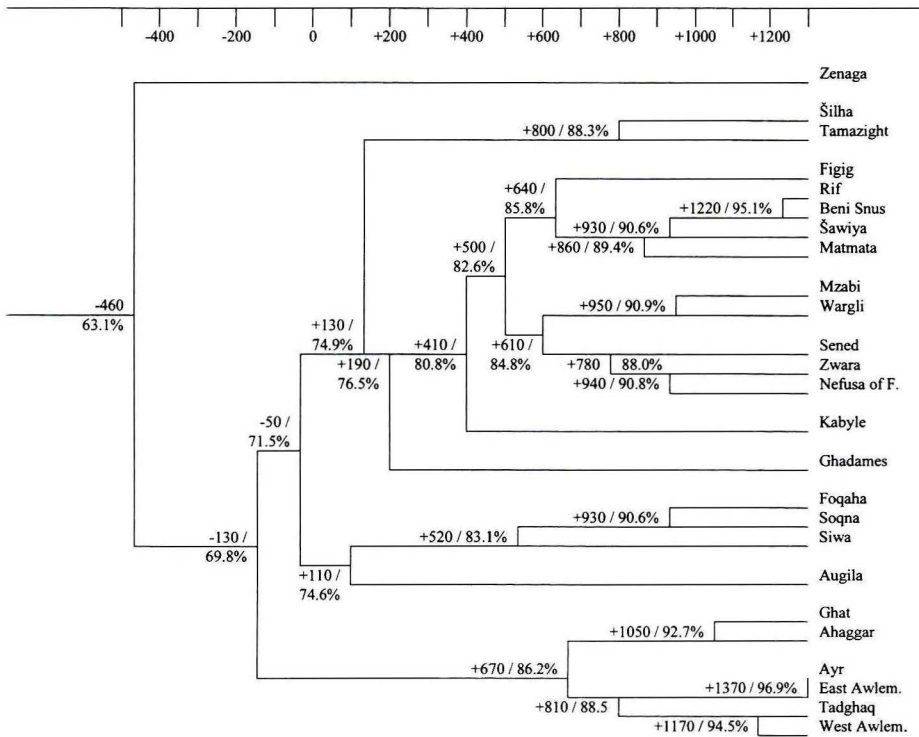
On classification of Berber

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

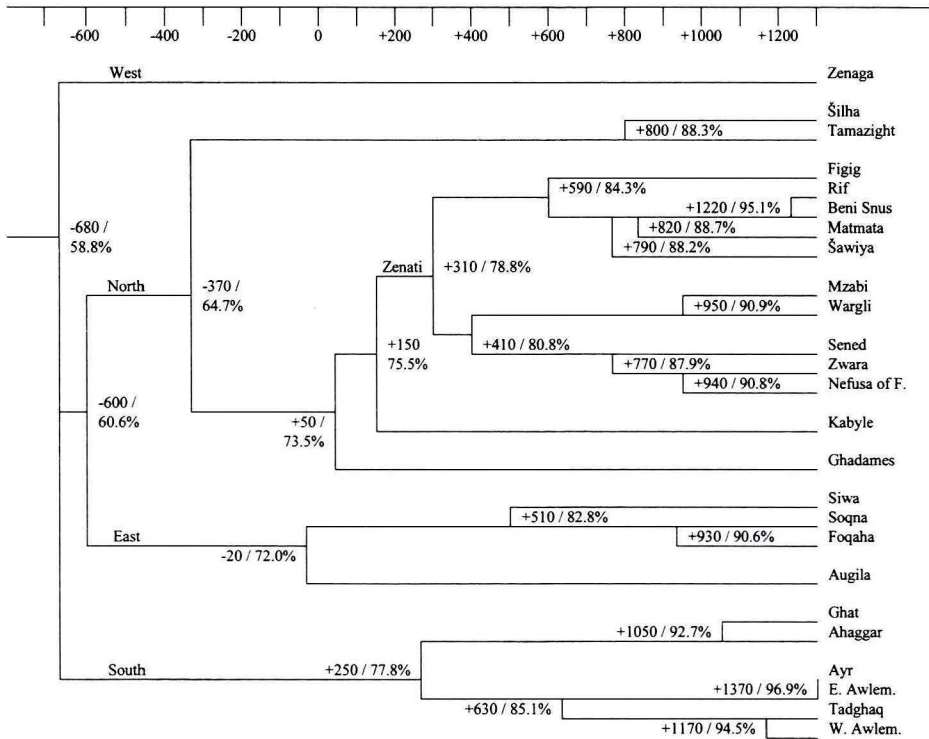
language	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.
1. Zenaga	64.4	66.3	68.9	61.2	62.0	63.0	60.0	58.9	65.5	64.1	62.9	61.5	61.2	64.4	64.7	62.9	64.5	61.8	62.0	63.3	62.6
2. Šilha		88.3	76.2	75.7	70.6	76.4	74.7	64.7	72.0	73.3	73.5	67.6	69.8	64.8	68.9	65.4	60.3	68.8	60.9	58.8	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. Sawiya										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	70.2	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. Fqaha																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.



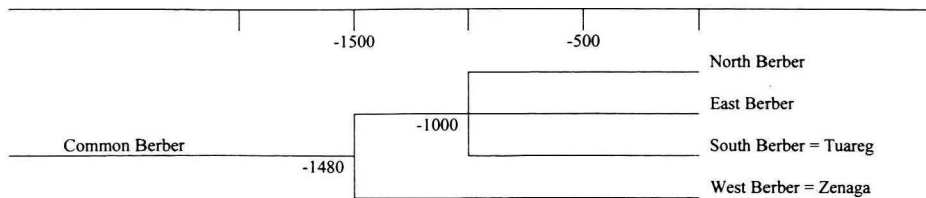
(b) Tree-diagram depicting the Berber dialect continuum based on minimal values in the glottochronological test.



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: $a/(100-b) \in <a/100; (a+b)/100>$. The dispersions reflected by intervals are really wide enough to modify the most deviant results, e.g. Augila-Sokna: $49\% \leq 72\% \leq 81\%$; Augila-Foqaha: $53\% \leq 73.5\% \leq 81\%$; Augila-Siwa: $49.5\% \leq 78.5\% \leq 86.5\%$.

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 mutual relations between Berber branches:



On classification of Berber

Wordlist A

gloss	Zwara	sources	Sened	Djerba	Šawiya	Matmata	Kabyle	origin
1a. all			kull		kull ^{Mil}		k'ull	Ar.
1b.							a(k)k ^r	√k ^r
1c.					qa ^{c AB}			Ar
2a. ashes			iyed		iyed ^{Mil} iyed ^{AB}	iyed	iyed	√γ-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 addis		√ ^c -d-s
4b.							acek ^r id	
4c.							acullid	
4d.							adebb ^w ar	?Ar √d-w-r round - #69b
5a. big	tam(ə)qqart amqar	M 55: f. Mil	amoqqrər	tamayārt n.	amuqran ^{Mil} maqqrān ^{AB}	ameqqrān	ameqq ^w ran	√m-qq-r
5b.							abarar	√b-r-r
5c.							afnyl	√f-γ-l, cf. Ah afe ⁿ yl
6a. bird	ağdīd	S ₇₀ , 44 K, #328	aštīf, pl. iıştaf					√g-d-d
6b.							is(err)ifeg : afeg, sriffeg #30 fly	√f-g
6c.					afrab ^{Mil} aferoh ^{Ma}		afrux	Ar
6d.							ttir	Ar
7a. bite	kərrəš	Mil				garreš	(k ^r)errec mordiller)	√k-r-š
7b.			aqer					Ar
7c.						qešš	yezz	cf. Ah eggez
7d.							eqges	√q-s
7e.							g ^r errem	√g-r-m
7f.							g ^w errec	Ar
8a. black			ayuggel		ayuggwal ^{Ma}			√γ-ww-l
8b.	aštāf	Mil		aššəttāf			ašəttāf	√s-tt-f
8c.					abərkan ^{AB} aberkān ^{Ma}	aberyān	aberkān	√b-r-k
8d.							esswad	Ar
9a. blood	idammen	Mil	idemmen		iđammān ^{Mil} iđammān ^{AB}	iđammen	iđim, pl. iđammen	√d-m
10a. bone	iyass	M ₅₇ , 85	ieyes, pl. iysen		iyās ^{Mil} = i ^r yass ^{AB} , pl. ihsan	i ^r yēs, pl. i ^r yüssān	i ^r yess	√γ-s
11a. breast	ifaf	M ₅₇ , 86	ifef					√f-f
11b.			iđmāren pl.		iđmarən ^{Mil}	iđmāren	iđmāren	√d-m-r
11c.					abebbūh, pl. ibebāh	tabbuct, pl. tibbucin	tabbuct, pl. tibbucin	√b-b(b)-C
11cd.					abbus ^{AB} , pl. ibbaš		b'ubbu(c) L.	√b-bb-C
11e.							irebbi, pl. irebban	√r-bb
12a. burn			ery		ieryā ^{Ma} irya ^{AB}	ery	rey	√r-γ
12b.							ezzu	√z; cf. Ah ezz
12c.							ezlef	?Ar
12d.							ss-eknef	√k-n-f; cf. Ah eknef
12e.	iraq	Mil	areq		iħraq ^{AB}		ehreq	Ar
12f.							caq	Ar
12g.							ddeqdeq	Ar
12h.							ccexcecx	Ar

12i.							ek'wi	Ar
13a. claw	iššar	Mil	iššer, pl. -en		iššar ^{Mil}	-	iccer	√s-k-r
14a. cloud	ažanna	Mil			tiženō ^{Ma} t'āžnu ^t , pl. t'iznaw ^{AB}			√g-n-w
14ab.					asegna ^B		asigna	√s+g-n
14c.						hēim		
15a. cold	asmad	Mil	iesmeṭ		asemmīd ^{Ma} isəmdən ^{AB}		esmēd	ismīd v. √s-m-ḏ
15b.	ssqj ^C	M 61						Ar
15c.							eb'red ⁱ v.	Ar
16a. come	yusād	M 25, 61: he came	as-ed	as-ed ^R	as ^{Mil}	-	as	√s
17a. die	yemmūt	S 716: died	emmeṭ		immet ^M māt ^{AB}	emmeṭ	emmet	√m-t
18a. dog	aydi	Mil	aidi, pl. iṭṭan	aidi ^R	aiō ^{Ma} ayd' i ^{AB} , pl. iḏ'an	aydi, pl. iydān		√y-d, pl. √y-d+n
18b.					(aqzin ^{AB} , pl. igzīnan little dog)	(aqzīn, pl. iqzīnen little dog)	aqzīn, pl. iq'zan	√q-z-n
18c.							(uḥḥay lévrier)	
19a. drink	šaw	M 12: imp.	āsw	asw ^R	šū ^{Mil} iswā ^{AB} isses ^{Ma}	esū	sew	√s-w
20a. dry	iqqōr	Mil	iaqqur		qorr ^{Mil} aqqur ^{AB}	iqqūr	yeqqur v. aquran adj.	√q-r
20b.							aḡermum ad.	?Ar
21a. ear	tmažžuyt, pl. tmažžuyin	M 55, 94	tamežžit, pl. timežžin		imažžī, pl. imežžān ^{Mil}	amežžuy, pl. imežžuyen	amežžuy, pl. imežžuyen	√m-z-γ
22a. earth	tmūrat	S 715: paese	(amurt, pl. timurā pays)	tamori ^R	(amort ^{Ma} pays) ṭamurṭ ^{Mil} t'muri ^{AB}	ṭāmmūrṭ, pl. ṭimūra	tamurt, pl. timura	√m-r
22b.	(išal sand, ash)	Mil; Serra > K #489	šal		šā'a ⁱ a ^{Mil} šāi ^{AB} , pl. išālān	šāl	akal	√k-l
23a. eat	á(y)atš hákyatš	M 34 M 31: fut.	eč	əč ^{Mil} eč ^R	eš ^{Ma} əčə ^{AB}	eš	eč	√k-s
23b.	taitān	M 38: she ate	tett		tēttān ^{AB} 3 pl.	hab. tett	iteṭṭ	√t-t
24a. egg	tamellalt	Mil	tamellāit		ṭamellalt ^{Mil} t'amellāl ^{AB} , pl. t'imellālīn	ṭamellāit, pl. ṭimellālīn	tamellalt, pl. timellatin	√m-l-l
25a. eye	tiṭṭ, pl. tiṭṭawinw	M ₅₇ , 85 M 35	tiṭ, pl. -awin		aḏiṭ ^{Mil} t'it ^{AB} , pl. t'ittawin	ṭēṭṭ, pl. ṭēṭṭawin	tiṭ	√t < ?√l.t
25ab.							pl. allen	√l
26a. fat n.	tadunt	Mil	tādumt		addunt ^{Mil} ddunt ^B	ṭadwent		√d-w-n
26b.					uqqi ^{AB} , pl. uqqīran			
26c.							tasemt	√s-m
26d.							lidam	Ar
26e.							ddhin	Ar
27a. feather	tarišit	M ₅₇ , 88			-	ērriš	errie	Ar
27b.					(r'aržalt, pl. r'iržalin f. of hen)			√r-g-l
27c.							incew, pl. inecwan ~ 36	cf. Ah enḡef
28a. fire	(a)l'afyat	M 3	eláfīt		l'afikt ^{AB} afīf ^{Ma}		l'afya	Ar < B?
28b.							√f-w	
28c.			timsi, pl. timsiwin		ṭimas ^{Mil} tims ^{Ma} imes ^{Ma}	timssi	timess	√m-s-y
29a. fish	tāgna	M ₅₇ , 84						√g-n
29b.				trābit				√r-b
29c.					aselm ^{Ma}	iselm, pl.	aslem, pl.	√s-l-m

On classification of Berber

						iselman	iselman	
29d.						lhūt	lhūt	Ar
30a. fly v.					afeg ^{Mil} yufeg ^{Ma}	-	afeg sriffeg	√f-g/y
31a. foot	ādar	M57, 84	tar, pl. iṭaren	dar ^{Mil} = dar ^R	pl. aṭarən dar ^{Ma} pl. iḍ'arṭən ^{AB}	dār, pl. iḍarṭen	adar, pl. iḍarṭen	√d-r
32a. full	ičur ččur v.	Mil S > K #186	ičur		ččar ^B v. itšer ^{Ma} r'āččū ^{AB}	itšūr	ačarən	√d-k-r
33a. give	ušiyid ušōnn	S 716: dammi M 18: they gave	uš		iušō ^{Ma} yif & uš ^{AB} (K #503, 506)	ūš	efk'	√k-f
34a. good			ilha				elhu v	√l-h
34b.			iebha					Ar
34c.			asbiḥ				uḇbiḥ	Ar
34d.					hla ^{Mil} ihla ^{AB} 3 sg. iahala ^{Ma}			Ar
34e.						ḍ-a[el]lāl		Ar
34f.							ḡerrez v.	√g-r-z, cf. Ah eḡrez
34g.							um ^C in	Ar
35a. green	azizaw	M57, 87	(azegzaw blue)	(azizāw blue)	azizaw ^{Ma} (azizaw ^{AB} blue)	(azeḡza blue)	zegzew v. be green, blue	√z-w-z-w
35b.			idel / adel				adal	√d-l
35c.				ilašfar = 100				Ar
					pl. iḇāzḡān ^{AB}			√b-z-g
					aqsavli ^{AB}			?Ar
36a. hair	āzagg/āzagg	M57, 84/86	pl. zaw-, sgt. dzaggut		zzaw, pl. izagdan ^{Mil} zaw ^{AB} , coll. izagg ^w en			√z-w
36b.						anzād	anzad	√m-z-d
36c.	azuf	Mil						√z-f
36d.							incew, pl. inecwan = 27	cf. Ah enḡef
37a. hand	āfus ofūs	M57, 85 Mil	fus, pl. ifessen	afus ^R	fus ^{Mil} - AB pl. ifassan ^{AB}	fūs, pl. ifāssen	afus, pl. ifassen	√f-s
38a. head	iyaff	M57, 85	ihf, pl. ihfawen	ihf ^{Mil} R	ihf ^{Mil} ihf ^{AB}		ixef, pl. axfiwen	√y-f
38b.						aqernū ^C , pl. iqernā ^C	aqerri, pl. iq'erra	√q-r
38c.							abbay	√b-y
39a. hear	āsāl	M 47: imp.	esel		isela ^{Ma} aslan ^{AB} 3 pl.	isla	sel	√s-l
40a. heart	ul	M57, 85	ul, pl. -awen		ul ^{Mil} = wūl ^{AB}	úl, pl. ulawen	ul, pl. ulawen	√w-l
41a. horn			išš, pl. -awen		iš ^{Mil} = iš ^M išš ^{AB}	qiš, pl. iqišwen	icc, pl. acciwēn	√s-k
42a. I	neč nāiš	S 716 M 76	neč	nič ^R	nāč ^{Mil} nāčē ^{AB}	neiš	nekk	√n-k
42b.				anā				Ar
43a. kill	āynay	M 9: he will kill	enyi		əny ^{Mil} inyn ^{AB} a tuée	eny	ney	√n-y
44a. knee	āfud	M57, 86	fud, pl. ifaden		fud ^{Mil} , pl. ifāddan ^{AB}	fud, pl. ifādden	afud, pl. ifuden	√f-d
45a. know	yāssān	M 26: knows	essen		assan ^{Mil} issan ^{AB}	essen	issin	√s-n
46a. leaf	tafrayt	Mil	tefret, pl. tifrai				iferr, pl. iferrawen	√f-r(-y)
46b.					alwarq ^{AB}	coll. elwerq		Ar
46c.					alqšqšt ^{AB} , pl. laqšaqš			
47a. lie	izzəl	Mil						√z-l
47b.			eṭtes = 76				eṭtes = 76	√t-s
47c.					E iens ^{Ma}			√n-s
47d.					W iherk ^{Ma}			√b-r-k

47e.						θwákka (Ar √t-w-k)		Ar
47f.							gen	√g-m; cf. Ah eġen
48a. liver	tása	M ₅₇ , 84	tesa & etsa, pl. tisawin		assa ^{Mil}	eṭṣā	tasa, pl. taswin	√s
49a. long	dā-zgrar	Mil	azegrer		azigrar ^{Ma} azəgrar ^{AB}	azīrār		√z-g-r-r
49b.							iy'zif	√y-z-f
49c.							acettudaw	?Ar
50a. louse	tiššit	M ₅₇ , 94	tillit, pl. tilcīn / tilliin		θilīθ ^{Mil} išet, pl. tiššin ^{Ma}	θiššet, pl. θiššin	tilk'ir, pl. -in tillicet, pl. -in	√l-k
51a. man	argāz argaz	P 415, S 716 M 15	ārgāz, pl. irgāzen	argaz = argaz ^{AB}	argaz ^{AB} , pl. irgazan	ariāz, pl. iryāzen	argaz, pl. irgazen	√r-g-z
51b.				ayaṭmaṣ				√y.t & √m sons of their mothers
51c.					(awt' am' ^{AB} , pl. iwt' man)	auṭem, pl. iūṭmān		√w-t-m or √w.t & √m
51d.							ateras	Ar
52a. many	aguda	Mil						√g-d-y (NZ III, 737-38)
52b.			egget		tigir ^{AB}		ṭtaqqa ṭtuqqet v.	√g-(t) (NZ III, 908-10)
52c.					labes ^{Ma}			
52d.					ieharrem ^{Ma}			
52e.					a'ggib ^{AB}			
52f.						āita		Ar
52g.						sih		Ar
52h.							izli	azal value
52i.							aṭas	√t-s
52j.							nezzeh	Ar
53a. meat	aysum	Mil	aksum, pl. susen	aysum	aksum ^B aism/ak ^{Ma} aksum ^{AB} , pl. iksmān	aism	aksum, pl. ik'esman	√k-s-m
54a. moon	taziri tažiri	M ₅₇ , 87 Mil	tiziri		(i'aziri clair de lune)	(taziri clair de lune)	(tiziri clair de la lune)	√z-r
54b.	(iyyur quarter of moon)	S > K #712			ayyur ^{Mil} yur ^{AB} , pl. iyāren	yūr	aggur	√y-r
55a. mountain	adrar	Mil	adrēr, pl. idurēr		adrar ^{Mil-AB} adrar ^{Ma}		adrar, pl. idurar	√d-r-r
55b.						lā'ari, pl. l'aryān		Ar
55c.						aybal		Ar
56a. mouth	imi imī	M ₅₇ , 85 Mil	imi, pl. imawen	imi ^R	imi ^{Mil} timmiš ^{Mil} imi ^{AB} , pl. imawn	imi aqēmmūm		√m
57a. name			ism, pl. ismawen		ism ^{Ma} = isām, 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}	taṣrūmt, pl. ṭiyermūn cou, nuque		√k-r-m
58c.							amġerġd, pl. imeġraġd : ag'erġd encolure, col	√m+g-r-d
58d.							a'enqiq	Ar
59a. new	d-ājdīd	M 93			-	aždiṭ	aždid	Ar
60a. night	īd īd	P 415 M ₅₇ , 85	it, pl. ieṭan		īd ^{AB} , pl. -ān īed ^{Ma}	ēd	īd, pl. uḍan & aḍan	√b-d
60aa.	dg-īd	Mil	daggit, pl. niṭan			[cf. B Men. deggīd de nuit]		√d-g & √b-d
60b.							llil	Ar

On classification of Berber

61a. nose	<i>tinzar</i> pl.	M 102, 219	<i>tenzert</i> , pl. <i>tinzer</i>	<i>tenzert</i> ^R	<i>t'inzar</i> ^{AB} pl. <i>anzarən</i> ^{Ma}		<i>inzer</i> , pl. <i>anzaren</i> <i>tinzer</i> , pl. <i>tinzar</i>	√n-z-r
61b.					<i>aħanfu</i> ^{Ma}			√h-n-f-f
61c.						<i>ahənšūs</i> , pl. <i>iħənšūšen</i>		√h-n-š-š
61d.						<i>taɣənžurt</i>		√ɣ-n-g-r cf. SB * <i>Hangūr</i>
62a. not	<i>we = wə- wal</i>	S 716, M 19 Mil	(<i>ur</i>) .. š		<i>E ur</i> ^{Ma}		<i>u(r) & wer</i>	√w-r
62b.					<i>W ul</i> ^{Ma}	<i>ul</i>		Ar
63a. one	<i>iğen</i> <i>iğğen</i>	S 715-16 P 416	<i>ižen</i> <i>ižet</i>	<i>izzən</i> ^{Mil} <i>izzən</i> ^R	<i>yigğ</i> ^B <i>ist</i> ^{Ma}	-	<i>yiwen</i> <i>yiwet</i>	√y-w.n/t
64a. person	<i>midden</i> pl.	M 90					<i>medden</i> pl.	√m+d+n
64b.						<i>ariāz</i> , pl. <i>irýāzen</i>		√r-g-z
64c.							<i>bnadem</i>	Ar
65a. rain n.	<i>d-anzar</i>	Mil	<i>ānzər</i> , pl. <i>inzaren</i>	<i>ānzər</i>				√m-z/z-r
65b.					<i>lameteng</i> ^{Ma}			
65c.					<i>ənnūgg</i> ^{Ma} 'ar', pl. <i>nnwawi</i> ^{AB}			?√n-w
65d.						<i>amān</i> = 94		√(y)-m
65e.							<i>ageffur</i> , pl. <i>ig'ejfran</i>	√g-f-r
65f.							<i>lehwa</i>	Ar
66a. red	<i>azgay</i>	Mil	<i>azuggey</i>	<i>azzuɣɣɔy</i>	<i>azuggay</i> ^{Mil} <i>azuggay</i> ^{Ma} <i>zəggwáɣ</i> ^{AB} : v. <i>zwiɣ</i>	<i>azúgg</i> ^{Ma} 'ay	<i>azegg</i> ^{Ma} 'ay	√z-w-ɣ
67a. road	<i>ābrid</i>	M 104	<i>abrid</i> , pl. <i>ibriden</i>	<i>abrid</i> ^{Mil} <i>abridh</i> ^R	<i>abrid</i> ^{Ma} , pl. <i>ib'rid</i> ^{AB} 'en	<i>abrið</i> , pl. <i>ibriðen</i>	<i>abrid</i> , pl. <i>ibredan</i>	√b-r-d
67b.							<i>amdiq</i> , pl. <i>imdiqen</i>	Ar √d-y-q
67c.							<i>ədiq</i>	Ar <i>ɬariq</i>
68a. root			<i>azer</i> , pl. <i>izuren</i>		<i>azwer</i> , pl. <i>izuran</i> ^{Mil}	<i>azwer</i> , pl. <i>izúwɾān</i>	<i>azar</i> , pl. <i>izuran</i>	√z/z-w-r
69a. round					<i>knunneð</i> ^{AB}		<i>ak'ernennay</i>	√k-r-n-n
69b.					<i>tōnneð</i> ^{Ma} <i>ttōnnəðən</i> ^{AB}			
69c.					<i>imduwər</i>	-	<i>imdewwer</i>	Ar
70a. sand					<i>izdi</i> ^{Mil} <i>igidi</i> ^{Ma}		<i>izdi</i>	√g-d
70b.	<i>išal</i>	Mil						√k-l
70c.					<i>reme</i> ^{Ma}	<i>errəme</i>	<i>ermel</i>	Ar
71a. say	<i>yənná</i> <i>yəMMá</i>	M 4: he says M 4: he said			<i>inna</i> ^{Ma} <i>ini</i> : <i>inna</i> ^{AB}	<i>ini</i>	<i>ini</i>	√-n
71b.	<i>āmlay</i>	M 14: I shall say	<i>emmel</i>	<i>amə</i> ^{Mil} <i>amel</i> ^R				√m-l
71c.							<i>siwel</i> : <i>awal</i> word	√w-l
72a. see	(a)zrid	M 19	<i>zri</i>	<i>zer</i> ^R	<i>zər = izra</i> ^M <i>zər</i> ^{AB}	<i>zer</i>	<i>zer</i>	√z-r
72b.			<i>rgeb</i>					Ar
72c.							<i>wali</i>	√w-l
72d.							<i>ḍill</i>	Ar
73a. seed	<i>izzu</i>	Mil						
73b.					<i>əzzarri</i> ^C 't		<i>zzen</i> ^C 'a	Ar
74a. sit	<i>g(a) məz</i>	M 58			(<i>r</i> <i>əgə</i> ^{Ma} 'məz to sit without touch of earth)			
74b.	<i>iqqim</i>	Mil	<i>qim</i>		<i>qim</i> ^{Mil} <i>qqim</i> ^{AB} <i>iekkim</i> ^{Ma}	<i>qqim</i>	<i>qqim</i>	√ɣ-y-m
75a. skin	<i>āglim</i>	M 37, 38	<i>aglim</i> , pl. <i>iglimen</i>	<i>aylim</i> ^{Mil}	<i>aglim</i> ^{AB} , pl. <i>iglimən</i>	<i>āglim</i> , pl. <i>iglimen</i>	<i>ag'lim</i> , pl. <i>ig'elman</i>	√g-l-m

75b.	ṭqášri	M ₅₇ , 88					iq ^{ccer} , pl. iq ^{ccran} = 3	Ar
75c.						abettān		Ar
76a. sleep	əttəs	M 90, 91	ettes		iettos ^{Ma} əttəs ^{AB}	ettēs	ettes	√-tt-s
76b.					gwan ^{Mil}		gen	√g-n
76c.					innuddam ^{AB}			√n-d-m
77a. small			amuzzian		amzian ^{Ma} aməzzyan ^{AB}	amzian	amezzyan imzi v.	√m-z/ɣ-y < √m-z-k(-y)
77ab.	ameškun	S > K #682		tamaškant n				√m-[z]-k
77c.					agilal ^{Ma}			√g-l-l
78a. smoke n.					dhan ^{Ma}	ddehān		Ar
78b.							abbu	√b
79a. stand	ibədd abeddi	Mil S > K #248			ibədd ^{AB}	bedd	bedd	√b-d-d
79b.						ekker		√k-r
80a. star	itrī	P 415	itri, pl. itran		iθrī ^{Mil} pl. iθren ^{Ma}	iθri, pl. iθrān	itri, pl. itran	√t-r
81a. stone	idyāyon pl. idyāyon pl.	M 76 M 85		idyagén			adyay, pl. idyayen	√d-ɣ-ɣ
81b.			tasettart, pl. tisettarin					√s-t-r
81c.			tmussayt ^{Mil}					√m-s-y
81d.					ahadi ^{Ma}			
81e.					r'a ɣrūt ^{AB} , pl. r'izrā	azrū		√z/ɣ-r-w
81f.					ab'ərdāl, pl. ib'ərdālon			√b-r-d-l
82a. sun	tāfuyt tfut	S > K #576 Mil	tfuit		θafuθ ^{Mil} t'afukt ^{AB}	θfuxθ	tafukt	√f-k
83a. swim					-	ʿawem	ʿum	Ar
84a. tail			atagguž		-	-		
84b.							tamyilt, pl. timyilin	√m-ɣ-l; ?Ah pl. imellway
84c.							ajeħnid, pl. ijeħnad < ?	
84d.							aze ^C k'uk', pl. ize ^C k'uk'en	Ar
85a. that	wuh wuddin	M 10 Mil			win ^{Mil}	wīn : θin pl. yīnin	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/θina	wa : ta	√w/t/y-h(-y)
86b.					ay, ayvi ^{Mil}			√y?
86c.					netta ^{Ma}			√n-t?
87a. thou	šek m. šem f.	S ₆₈ , 446	šek šem	šákki = kec ^R čemmi ^R	šəkt ^{AB} šəm ^{AB}	šekk šemmi	keçç kemmi	√k-y-k √k-y-m
88a. tongue	ilas	M ₅₇ , 86	ils, pl. -awen		ilas ^{Mil} iles ^{Ma}	īlés, pl. ilsawen	iles, pl. ilsawen	√l-s
88b.				lārwəṭ				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	tiymest, pl. tiymas	√ɣ-m-s
89d.					tiser ^{Ma}			√s-r
90a. tree	(š)ššjaR	M 7			tašžirt ^{AB} , pl. tišžirin, coll. ssžar		ttežra	Ar
90b.					uḫelif (*oak)			Ar
90c.						azqqr, pl. izeyrān		√s-ɣ/qq-r cf. #20 dry
91a. two	sənn	M 30	sen : senet	thin ^R	sən ^{Mil} sen ^{Ma}	sén	sin : snat	√s-n-y
92a. walk	yəflā	M 25: he went						√f-l

On classification of Berber

92b.			<i>enneṭ</i>					√n-ṭ
92c.	<i>ugur</i> <i>iggur</i>	S > K #630 Mil			<i>ugi</i> ^{AB} imp. <i>iugi</i> ^{Ma}	<i>uḡḡūr</i>		√-ww-r?(NZ III, 854-55)
92d.					<i>aššaw</i> ^{AB} imp.			cf. √s #16
92e.					<i>rwah</i> ^{AB} imp.			Ar
92f.						<i>ddu</i>		√d
92g.						<i>glu</i>		√g-l (NZ III, 767-68)
93a. warm	<i>iskaas</i>	Mil						√k-(H)-s
93b.			<i>iahma</i>		<i>ihma</i>		<i>ahmayan</i>	Ar
93c.					<i>del-woheuz</i> ^{Ma}			
94a. water	<i>āman</i>	P 415	<i>amān</i>	<i>āman</i>	<i>aman</i> ^{Mel-AB}	<i>aman</i>	<i>aman</i>	√(y)-m
95a. we	<i>nešnin</i> <i>našnin</i>	Ss, 446 M 76	<i>šnini</i>	<i>neššin</i> ^R	<i>načənin</i> ^{Mel} <i>našnin</i> ^{AB}	<i>nešni</i> m. <i>neššenti</i> f.	<i>nek</i> ⁿ ni m. <i>nekk</i> ⁿ enti f.	√n-k-n
95b.				<i>nāhnu</i>				Ar
96a. what	<i>mätta</i>	M 19	<i>mai, ma</i>		<i>matsa</i> ^{Mel} <i>mala</i> ^{Ma}			√m(-y/t)
96b.							<i>amec'b'ed</i>	Ar
97a. white	<i>māllal</i>	M 55	<i>amellāl</i>	<i>amallāl</i>	<i>amella</i> ^{Ma} <i>amella</i> ^{AB}	<i>amellal</i>	<i>amellal</i>	√m-l-l
98a. who	<i>MaMma</i>		<i>mai, ma</i>		<i>mān</i> ^{Mel} <i>wi</i> ^{AB}			√m(-n/y) √w
98b.						<i>wi / wu</i>		
99a. woman	<i>tameṭṭūt</i> <i>taməṭṭut</i>	P 415 M57, 90	<i>tamaṭṭut</i>	<i>tamáttoṭ</i> <i>tameṭṭuth</i> ^R	<i>tameṭṭōt</i> ^{Ma} <i>t'aməṭṭūt</i> ^{AB}	<i>ṭamṭṭuθ</i>	<i>tameṭṭut</i>	√m-ṭ
99b.	<i>tisednan</i> pl.	M 112	<i>tisednan</i>	<i>tisədnān</i>	<i>tisedenan</i> ^{Ma} <i>tisədnān</i> ^{AB}	<i>ṭisedənnān</i>		√s-d-n
99c.							pl. <i>tilawin</i> & <i>tulawin</i>	√l(-w)
100a. yellow	<i>āwray</i>	M 5			<i>auray</i> ^{Ma} <i>awray</i> ^{AB}	<i>auray</i>	<i>awṛay</i>	√w-r-γ
100b.				<i>ilašfar</i> = 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	<i>kul(lu)</i>	<i>kul, šul</i>	<i>ēlik'ull</i>	<i>l'elkull</i>	<i>kul</i>	<i>kull</i>	<i>kull</i>	Ar
1b.							<i>ašš</i>	√-kk'
1c.		<i>qah</i>		<i>l'zBq'qa</i> ^C	<i>qa</i> ^C		<i>ga</i> ^C	Ar
1d.					<i>žžber</i>			Ar
1e.							<i>aytulu</i>	√y-t-l
2a. ashes	<i>iyed</i>	<i>iyed</i>	<i>iyed</i>	<i>Sc,lz,Ur,Tz'iyed'</i>	<i>iyed</i>	<i>iyed</i>	<i>iyed</i>	√γ-d
2c.				<i>l'z,Ur,Tz'f'nifest</i>				√n-f-s
3a. bark						<i>tifrit</i> , pl. <i>tifray</i> = #46	(<i>tifrit</i> , pl. <i>tifray</i> leaf)	√f-r-y
3d.	<i>elqehert</i> , <i>leqšoret</i>	<i>elqehert</i> , <i>leqšoret</i> <i>aqšur</i>	<i>aqšur</i>	<i>l'z,Bq,Am'aqšur</i>	(<i>taqcurt</i> peau de grenade)			Ar
3e.				<i>Am,Bq'f'hašit'</i>				Ar
3f.							<i>tara</i>	√r
4a. belly	<i>st'adis</i> , pl. <i>idusan</i>	<i>adis</i> , pl. <i>idusan</i> <i>PC'addis</i>	<i>a'c'addis</i> , pl. <i>i'c'addisen</i>	<i>l'z,Ur'a'c'addis</i>	<i>tadiss</i> , pl. <i>tidišin</i> & <i>tideswin</i>	<i>a'c'addis</i>	<i>a'c'addis</i> , pl. <i>i'c'addas</i>	√c'-d-s
4e.	<i>ahlig</i> , pl. <i>ihelgan</i>							Ar
4f.			<i>ṭa'c'abbūt</i> , pl. <i>ṭi'c'abbūṭin</i>					√c'-b-ṭ
4g.				(<i>adan</i> , pl. - <i>en</i> intestines)		<i>adan</i>	<i>adan</i> , pl. <i>adanən</i>	√(w)-d-n
5a. big	<i>imeqqoren</i>	<i>imeqqoren</i>	<i>āmēqqrān</i> <i>imēqqranen</i>	<i>l'z,Bq,Tz,Am'</i> <i>amoqran</i>	<i>ameqqran</i>	<i>aməqqran</i>	<i>amaqqaran</i>	√m-qq-r
5d.					<i>lqudert</i>			Ar
6a bird	<i>aḡdiḡ</i> , pl. <i>iḡdaḡ</i>	<i>aždiḡ</i> , pl. <i>iždaḡ</i>	<i>aždeḡ,aždeḡ</i> pl. <i>iždiḡaḡ</i>	<i>l'z,Tz,Bq,Ur'</i> <i>ažd' iḡd'</i>	(<i>aždiḡ</i> , pl. <i>iždiḡen</i> gamin)	<i>aždiḡ</i> , pl. <i>iždaḡ</i>	<i>aždiḡ</i> , pl. <i>iždaḡ</i>	√g-d-d
6c.				<i>Sc'afruh</i>	(<i>afruh</i> young bird)			Ar
6d.					<i>ttir</i> , pl. <i>ttuyur</i>			Ar

6e.					aberðal, pl. iberðalen			√b-r-d-l
7g. bite	ešš	ec = ʔēē						√k-s = #23
7d.		^p qqas						√-qq-s
7h.			ezā'āf	^{12,13} ez'af				√z'-f
7i.				^{13,Am} eddem				√-d-m
7j.				^{Ba} berrem				√b-r-m
7k.				^{Se} atš				
7l.					ntar			√n-t-r
7m.						əddəd	kəddəd	√(k)-d-d
8e. black	iseggan = ^{Ss} asggān					0		√s-ww
8f.		idlan						√d-l
8g.		ahebšan						
8c.		ibexxan ^p abaršan	beršen	^{Se,Bq,Am,13} aberkān	abercan, pl. ibercan		abarčan	√b-r-k
9a. blood	idammen	idammen	iðammen	^{12,13} id'ammen		idammān	idammān	√d-m
10a. bone	iḡess, pl. iḡsan	iḡess, pl. iḡsan	iḡēs, pl. iḡssān	^{12,13} iḡes	iḡess, pl. iḡsan	iḡas, pl. iḡasan, iḡsan	iḡas, iḡs, pl. iḡsan	√ḡ-s
11a. breast	if, pl. iffan	if, pl. iffan	iḡēf, pl. iḡēfān		iff, pl. -an	iff, pl. iffan		√f-f
11b. poitrine	idmaren		aðmer, pl. iðmāren	^{12,13} id'māren			idmarān	√d-m-r
11f. poitrine		esseder						√s(+/-)d-r
11dd.				^{R,Se} abbīš				√-bb-C
11d.		bubba, pl. ibubbaten			buppu			√b-bb
11g.							zizi	√z-z onom.
12j. burn	ežder = ^p ždēr							√z/s-d-r
12a.		aḡ	erḡ		ssreḡ : reḡ to be burnt	aḡ	aḡ	√r-ḡ
12j.		essir						√s-r
12k.		ekmoḡ = ^p kmoḡ		¹² ekmeḡ				√k-m-d
12l.		^p ḡus intr.						
12m.				¹² eqd'a < Ar √w-q-d				Ar
12c.							əzlof	?Ar
12e.		ehreg		^{12,Se} ehraq			əhraq	Ar
13a. claw	išker, pl. askaren	iššer, pl. aššāren = ^p aššār	iššer, pl. aššāren	¹² iššer	iccer, pl. accaren	aššar, pl. -an	aššar, pl. -an	√s-k-r
13b.		axbaš						Ar
14ab. cloud		asegna, pl. isogna = ^p isagnaw		^{13,Am} asegnu	asinew coll.			√
14a.					(tižnewt, pl. tižnaw rainy cloud)		tažniwt	√g-n-w
14d.		^p tag'utt #78	ḡāiyūḡ, pl. ḡīyūḡin	¹³ ḡaiyuḡ				√ḡ
14e.	amedlu, pl. imedla = ^{Ss} amḡlhu, pl. imḡlān :							√d-l cf. Šilha d-l einwickeln (Stumme)
14c.						ḡammēm v.		Ar
15a. cold	isemmeḡen	isemmeḡen	ašemḡmāḡ, pl. išemḡmaḡen	^{12,R,Se} ašemḡiḡ	šmeḡ v.	ašemḡmaḡ	ašemḡmaḡ	√s-m-d
15d.				^{Se} ažarḡit				
15c.					bred v.			Ar
15e.							aḡris	√g-r-s; cf. Ah tagrest
16b. come	ekk							√k
16c.		edud = ^p ddu go + d near						√d
16a.	ašked = ^{Ss} aššk		āsed	^{12,13,Se} as(ed)	as	as	as	√s

On classification of Berber

16d.							ayya!	vy
17a. die	emmet	emmet	emmeθ	^{Lz,RSe} emmet	mnet	mmat	ammāt	√m-t
18a. dog		aīdi, pl. iḍan	aīdi, aīḍi, pl. iḍ/ḍān	^{Lz} aīd'i	aydi, pl. iḍan	aydi, pl. iḍan	aydi, pl. iḍan	√y-d, pl. √y-ḍ+n
18b.	ikzin							√q-z-n
19a. drink	seow	seow = ^P saw	sū	^{Lz,RSe} su	sew	saw	saw	√s-w
20a. dry	iqqoren	iqqoren	qār, p.p. iqūr	^{Lz,Ur,Yz,Am} eqqur v.	ameqqur : qqar v.	yəqqur v.	yəqqur v.	√q-r
20c.		ibesen						√b-s
20d.				^{Ja} iuzey				√z-γ
20e.						ənšaf	ənšaf v.	Ar
21a. ear	amezzor, pl. imezgan	amezzor, pl. imejjan = ^P amezzuy	θimāzet, pl. θimāḍin	^{Lz,Se,Ur,Yz} amezzuy	amezzuy, pl. imezgan	tamāzzit, pl. timezzin	tamāzzuxi, pl. timāzgin	√m-z/ɣ-γ
22a. earth					(tamurt, pl. timuṛa pays : amur part)	tamurt, pl. timuṛa	tamurt, pl. timuṛa	√m-r
22b.	akal	akal = ^P ašal	šāl	^{Se} kal	cal			√k-l
22c.				^{Se} takka				
22d.							taɣuri	√ɣ-r
23a. eat	ešš	eč = ^P čč	eṯš, ēṯč	^{Lz,Se,Ur,Bq,Am} eṯš	tec	ašš	ašš	√k-s
23b. habit.			tett		tett	yəttət	yəttatt	√t-t
24b. egg	taglailt, pl. riḡlail	tajlailt, pl. riḡlail						√g-l-y
24a.			θamellālt, pl. θimellālīn	^{Lz,Yz,Ur,Bq} t'amellālīn	tamellālt, pl. timellālīn			√m-l-l
24c.				^{Se,Am} t'agfilit				√g-f-l
24d.						tamḍərt, pl. timāḍrin	tamḍərt, pl. timāḍrin	√m-ḍ-r
24e.							tazdalt, pl. rīzda	√s+d-l
25a. eye	tiṭ	tiṭ	θēt, ann. tēt pl. θiṭṭawin	^{Lz,RSe} t'iṭ	tiṭt, pl. -awin & aṭṭaw	tiṭt, -awin	tiṭt, -awin	√t < ?√l,t
25ab.	pl. allen	pl. allen		pl. ^{Se} iwaŋen ^{As} allen				√l
26a. fat n.	tadunt	tadunt	θāḍūnt	^{Lz,Se,Bq,Am,Yz} t'ad'unt	tadunt	tadunt, pl. tiduna	tadunt, pl. tiduna	√d-w-n
26d.						lidam		Ar
27a. feather	tarrišt, pl. erriš	errišet, pl. errišet	ērrīš		rrič	rrišet		Ar
27d.	^{Si} iberž, pl. iberžén							
27e.						tbulbul, pl. tibulbulin	tbulbul, pl. tibulbulin	√b-l-b-l
28a. fire	el'afit	l'afit	l'afitθ		l'afeyt	la'fit		Ar < B?
28d.		takat						√k
28e.		ennar						Ar
28b.							tɣawt : iɣaw be clear	√f-w
28c.			θimssi	^{Lz,RSe} t'imessi	(timsi fièvre)	timsi	timsi	√m-s
29c. fish	aslem, pl. iselman	aslem, pl. iselman	aslem, pl. islemen	^{Lz,Se} aslem	aslem, pl. iselman			√s-l-m
29d.						lhut	əlhut	Ar
30a. fly v.			āfiy	^{Lz} afey				√f-y/g
30b.	ferr	efru = ^P afraw			fferfer	afor, fforfor	fforfor	√f-r
30c.				^P ēd'wa				
31a. foot	aḍar, pl. iḍaren	aḍar, pl. iḍaren	ḍār, pl. iḍārren	^{Lz,Se,Ur,Bq,Am} ḍ'ar	ḍar, pl. iḍaren	ḍar, pl. iḍaren	ḍar, pl. iḍar(r)ən	√ḍ-r
31b.							tins-i, pl. -a animal f.	√n-s
32a. full			eṯšār, p.p. iṯšūr	d'kar v.	ṯcar v.	yəššur v.	yəššur v.	√ḍ-k-r
32b.	idemmeren							√d-m-r
32c.		imlan						√m-l
32d.		^P ēmmar						Ar
33a. give	efk	uš	ūš	^{Yz,Ur} u'š, ^{Se} ekk	wec / uc	uš	uš	√k-f

34a. good			yelha				√l-h
34h.			awahōi				Ar
34i.				^{lz} d'ifēn			
34c.				^{lz} d'usbiḥ	uṣbiḥ		Ar
34j.				^{lz} mezian			Ar
					umliḥ		Ar
34e.		i'ēlen (see Milb, 262) = ^r izil					?Ar
34k.		^r yudu					√y-d
34l.	i'ēlen						Ar ^c adl correct
34m.		iheyyan					Ar hayyi' be nice
34b.					əbha		Ar
34n.						aməc	
34o.						əslah	
34p.						wata	
35a. green	azegzaw	azegzaw	āzīza	^{Ur,Bq,Am} azegzau	(aziza blue)	azizaw (azizaw blue-green)	√z-w-z-w
35b.					adal, pl. idalen	dal	√d-l
36. hair	azzar, pl. -en	azzar, pl. -en					√z-r
36a.					zaw	zaw	√z-w
36b.				^{lz} anzēd'			√m-z/q-d/d
36c.			zāf, pl. izaffēn	^{lz} azāf	zaff, pl. izaffēn	zaff, pl. izaffēn	√z-f
37a. hand	afus, pl. ifassen	afus, pl. ifassen	fūs, pl. ifāssen	^{Se} afus	fus, pl. ifassen	fus, pl. ifassen	√f-s
38a. head	ixf, pl. ixḫawen	iy(e)f, pl. iyḫawen	ihf, pl. ihḫawen	^{lz,lx,lz} ihf	ixef, pl. ixafen	iyəf, ixf pl. -awən	√y-f
38c.	agayu, pl. iguya						√g-y
38b.			aqūrru, pl. iqūrrūyen				√q-r
38d.			aqēlqūl		aqelqul, pl. iqelqal		√q-l-q-l
38e.			azellif, pl. izellāf	^{lz} azellif			√z-l-f
39a. hear	sel(l)	^r səl	səl	^{Se} essel	sell	səll	√s-l
39b.		sfeld					
39c.		esme ^c					Ar
40a. heart	ul, pl. ulawen	ul, pl. ulawen	(w)ūl, pl. ūlawen	^{lz,Se} ul	ul, pl. ulawen	ul, pl. ulawən	√w-l
40b.						lkəbdət	Ar
41a. horn	isk, pl. askiwen	iš, pl. aššiwen = ^r išš	išš, pl. iššawen	^{Se} isk		aššaw, pl. aššawən	√s-k
41b.					agellu ^c , pl. igelwa ^c		Ar
42a. l	nekkīn	nikkin = ^r nakk	nešš	^{lz} neč, ^{Se} nekk ^r nešš	net(t)c	nəšš	√n-k
43a. kill	eny	eny = ^r nəy	ēny, h. neqq	^{lz,lx,Bq} ney	ney	nəy	√n-y
43b.		egtel					Ar
44a. knee	afud, pl. ifadden	afud, pl. ifadden	fūd, pl. ifadden	^{Se} afud	fud, pl. ifadden	fud, pl. ifudan	√f-d
44b.		errekobit					Ar
45a. know	essen	essen = ^r isin	essen	^{lz,R,Se} esn	ssen	əssən	√s-n
45b.		e'ref					Ar
46a. leaf	ifer(r), pl. ifrawen	ifer(r), pl. aḫriwen	(pl. ifriwen young leaves)	^{Se} afar	(afer feuille de chou)	tifrit, pl. tifrāy = 3	√f-r(-y)
46b.		tawriqt	luwəq coll.		lewəq coll.		Ar
47b. lie			jeffēs	^{lz,R,Se} eḫḫas	əḫḫas	əḫḫas	√f-f-s = 76
47f.	(e)gen	žen					√g-n
47a.			ežžēl	^{lz,Se} ežžal			√g-l
48. liver	tasa, pl. tasiwin	tasa, pl. tasiwin	tša, pl. tšawin	^{Se} t'asa	tša	tša, pl. tšawin	√s
49a. long		azirdr		^{Ur,Bq,Am} azegrar	aḫḫar	azəgrar	√z-g-r-r
49b.	iyezziḫen	ayəzzif					√y-z-f

On classification of Berber

49c.		itewelen			tal			Ar
50a. louse	tilkit, pl. tilki(ti)n	nilišt, pl. tilišin, tillaš	θiššitθ, pl. θiššin	^{Bq} θiššitθ	nilleyt, pl. tilcin	nillit, pl. tilšin	nillit, pl. tilšin	√l-k
51a. man	argaz, pl. irgazen	argaz, pl. iregzen = ^P aryaz	ārgāz, pl. irgāzen	^{Ur, Bq, Am} argāz	argaz, pl. irgazen	argaz, pl. irgazen	argaz, pl. irgazen	√r-g-z
51e.			lāōāmi, pl. bnāōem					Ar
51f.							aterras	Ar
52b. many	eggutenin							√g(-t)
52k.		^C eddānin = ^P addu v.						Ar
52l.			yūsā ^C					Ar
52m.				^{Se} bezzāf	bezzaf			√b-z-f
52n.				^{Iz} erru				
52i.				^{Iz} attas	aftas			√t-s
52o.							walu	√w-l
52p.				^{Iz} qbāla		uylab	yəylab	Ar
52q.					lbala, pl. lbalawat			Ar
52r.				^{AN} šella				Ar √ ^C -l-h
52s.				^{Ur} ḡunnit'				Ar √d-n- ^C
52t.					amrellah			Ar
53a. meat		agsum = ^P aksum	aysūm	^{Am} aksum	aysum	aysum, pl. iyasman	aysum	√k-s-m
53b.	tifeyyi = ^S tifii & tifii							√f-y
53c.					taqedditt : qeddedd tailler de pieces			√q-d-d
54a. moon			(θāziri moonlight)		(tziri clair de la lune)	taziri	taziri	√z-r
54b.	ayyur	ayyur	yūr	^{Se} ayur ^{Bq} iur	yur, pl. iyuren	(yur, pl. iyarən new moon)	(yur, pl. iyarən new moon)	√y-r
55a. mountain	adrar, pl. idraren		ādrār, pl. iḡārūr	^{Iz} ad'rar, pl. id'urar	ad'rar, pl. idraren			√d-r-r
55b.		^C ari, pl. le ^C wari						Ar
55c.		^P zḡbəl						Ar
55d.						agərgub, pl. igərgab		√g-r-g-b
55e.					(tawirt big stones)	awrir, pl. iwriran		√w-r-r
56a. mouth	imi, pl. imawen	imi, pl. imawen	imi, 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.			lisēm, 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.	tamegreft, pl. timegraḡ	tamegreft, pl. timegraḡ = ^P amgard						√m+g-r-ḡ
58ce.			ažernēḡ, pl. ižernāḡ	^{Iz, Ur} ažarnid'				√g-r-n-ḡ
58f.					menjey			
58d.				^{Se} el'ong				Ar
58g.							taylabit, pl. tiylabin	√y-l-b
59a. new	uždid, leždid	uždid	ēždeō	^E d'edžd'id'	aždid	aždid	aždid	Ar
60a. night	id,	id,	ēḡ, ēḡ,	^{Iz} id'	id, pl.	id, pl.	id, pl.	√ḡ-ḡ

		pl. <i>iḍawen</i>	pl. <i>iḍdān</i>		<i>iḍan</i>	<i>iyḍan</i>	<i>iyḍan</i>	
60aa.	<i>tadaggaṭ</i> , pl. <i>tidaggaṭin</i>					<i>daggaḍ</i>		√d-g & √b-d
60b.				¹² <i>ellijit</i> ^{12,Se,Bq,Am}	<i>liliet</i>			Ar
61a. nose		<i>tinzerṭ</i> , pl. <i>tinzar</i> = ¹ <i>riḡnzar</i>	<i>inzer</i> , pl. <i>inzār</i> & <i>ḡinzerθ</i> , pl. <i>ḡinzār</i>	<i>anzār</i>	<i>funzer</i> , pl. <i>ifunzriien</i> & <i>anzaren</i> : <i>tinzerṭ</i> , pl. <i>tinzar</i> <i>narine</i>	<i>tinzarṭ</i> , pl. <i>tinzar</i>	<i>tinzerṭ</i> , pl. <i>tinzar</i>	√n-z-r
61d.	<i>tinḡert</i> , pl. <i>tinḡar</i>							√n-h-r
61bc.			<i>āhenfūr</i> , pl. <i>iḡhenfār</i>					√h-n-f-r
61e.			<i>ameḡšem</i> , pl. <i>imeḡšam</i>					Ar
62a. not	<i>ur</i>	<i>ur</i>	<i>u, ūr</i>	¹² <i>ur</i> .. <i>š</i> ¹² <i>ur</i> .. <i>min</i>		<i>u, wəl</i>	<i>u, wəl, wal</i>	√w-r
62b.					<i>ul</i>	<i>ul</i>		Ar
63a. one	<i>yan</i> m. <i>yat</i> f.	<i>yun</i> & <i>iḡ</i> m. <i>yut</i> & <i>iḡt</i> f.	<i>iḍzen</i> m. <i>ḡiḡt</i> f.	^{Se} <i>yiwēn</i> & <i>un</i> ¹² <i>ian</i> m. : <i>iat</i> f.	<i>iḍzen</i> m. <i>yicṭ/yicc</i> f.	<i>iggaṇ</i> <i>iggaṭ</i>	<i>iggaṇ</i> <i>iggaṭ</i>	√y-w-n/t
64a. person	<i>medden</i> pl.	<i>midden</i> pl.			(<i>midden</i> gens)	(<i>midden</i> gens)	(<i>midden</i> gens)	√m-d+n
64d.			<i>had</i>					Ar
64e.					(<i>iman</i> soi-mème)	pl. <i>iman</i>	(pl. <i>iman</i> soul)	√m(-n)
64c.		<i>ḡanadām</i>	<i>lāḡāmi</i> , pl. <i>ḡnādēm</i>	^{12,R,Se} <i>ḡnad'em</i>	<i>ḡnadēm</i> , pl. <i>id ḡnadēm</i>	(<i>lāḡ</i>) <i>ḡnadām</i>	<i>ḡnadām</i>	Ar
65a. rain n.	<i>anzar</i> , pl. <i>inezran</i>	<i>an'zar</i> , pl. <i>inezran</i>		^{12,R,Se} <i>ānzār</i>		<i>amzar</i> , pl. <i>imuzar</i>		√m-z/z-r
65g.			<i>ḡbīša, ḡbīxa</i>		<i>t-bca</i> , pl. <i>ti-bicaw</i>			√b-k
65h.					<i>leydir</i>			Ar
65i.							<i>taḡniwt</i>	√g-n-w
66a. red	<i>azoggaṭ</i>	<i>azoggaṭ</i>	<i>azuḡḡ'ay</i>	<i>azuḡḡ'ay</i>	<i>azekk'ay</i>	<i>azoggaṭ</i>	<i>azoggaṭ'ay</i>	√z-w-γ
66aa.		<i>amezgoṭay</i>						
67a. road		<i>abrid</i> , pl. <i>iberdan</i>	<i>ābriḡ</i> , pl. <i>ibriḡen</i>	^{12,R} <i>abrid'</i>	<i>abrid</i> , pl. <i>ibriden</i>	<i>abrid</i> , pl. <i>ibridan</i>	<i>abrid</i> , pl. <i>ibridan</i>	√b-r-d
67d.	<i>ayaras</i> , pl. <i>iyarasen</i>							√y-r-s
67e.				^{Se} <i>izerf</i> ^{12,Se,Bq,Am}				√z-r-f
68a. root	<i>aḡur</i> , pl. <i>iḡuran</i>	<i>azur</i> , pl. <i>iḡuran</i>	<i>āzwer</i> , pl. <i>iḡuwrān</i>	<i>azwar</i>	<i>azwer</i> , pl. <i>iḡewran</i>	<i>aḡur</i> , pl. <i>iḡuran</i>	<i>azur</i> , pl. <i>iḡuran</i>	√z-z-w-r
69a. round			-			<i>kkarnunni</i> v.	<i>akarnannay</i>	√k-r-n-n
69b.	<i>i(m)deweren</i>	¹ <i>amduwār</i> = <i>ittudeweren</i>		¹² <i>idwar</i>	<i>tadewwirt</i>	<i>imdawwār</i>	<i>imdawwār</i>	Ar
69bb.	<i>eddaret</i>							Ar
69c.							<i>agnunnay</i>	√g-[l]-n
70a. sand				^{12,Ut,Tz} <i>iḡḡi</i>	<i>iḡḡi</i>	<i>iḡḡi</i>		√g-d
70d.	<i>amlal</i>							√m-l-l; #97
70c.		<i>erremel</i>	<i>errēmleθ</i>	^{Se} <i>ermēl</i>	<i>ṛremlet</i>			Ar
71a. say		¹ <i>ini</i>			<i>ini</i>	<i>ini</i>	<i>ini</i>	√n
71d.			<i>sedmer</i>					√d-m-r
71c.	<i>sawel</i> : <i>awal</i> word	<i>siwel</i> : <i>awal</i> word	<i>siwel</i> : <i>awāl</i> speech	^{12,Se} <i>siwel</i> : <i>awāl</i>	<i>ssiwel</i> : <i>awal</i> word			√w-l
72a. sec	<i>zer</i>		<i>zēr</i>	^{Se} <i>zār</i>	(<i>lār</i> visitor)	<i>zār</i>	<i>zār</i>	√z-r
72d.	<i>emnid</i>	<i>emnad</i>						√m-n-d
72e.		<i>ennuyē</i> = ¹ <i>annay</i>						√n-y
72c.				¹² <i>wala</i> ^{Am,Bq}				√w-l
72f.				<i>naḡ'or</i>				
72g.				^{Am,Bq} <i>ḡemm</i>				
72e.					<i>mmater</i>			√m-t-r
73b. seed	<i>azra</i> ^c	<i>azerte</i> ^c	<i>ezzērti</i> ^c <i>āḡ</i>	-	<i>zzariri</i> ^c <i>al</i>			Ar
73c.	¹ <i>amud</i>							√m-d
73d.		¹ <i>ifsan</i>				<i>ayfas</i>	<i>ayafs</i>	√y-f-s
74c. sit	<i>sekkus</i> = ¹ <i>sktus</i>							√k-s
74b.		<i>eqqim</i> =	<i>qim, ēqqim</i>	^{12,R}	<i>qqim</i>	<i>agqim</i>	<i>agqim</i>	√γ-y-m

On classification of Berber

74d.		^p qim/yim eggiwer		qim, eqqim				
75a. skin		aglim, pl. iglimen = ^p ag'lim				aglim, pl. iglimen	aglim, pl. iglimen	√g-l-m
75ab.	ilem, pl. ilmawen		ilem, pl. ilmawen	^{lz} ilem	ilem, pl. ilmawen			√l-l-m
75d.	st asrai, pl. israyen	asrai, pl. israyen						√s-r-y
75c.						tabəttant	tabəttant	Ar
76a. sleep			eṭṭəs	eṭṭas = 47	tteṣ	eṭṭas = 47	eṭṭas = 47	√t-ṭ-s
76b.	gon, gen	žen = ^p gən						√g-n
76c.						nnuddəm	ənnuddəm	√n-d-m
77a. small	mezzeyen	mezzeyen = ^p amazzyan	am(ez)zyān, pl. imzyānen	mezzei	amezzyan		imazzi	√m-z-y
77d.						akdid	akdid	√k-d-d
77e.						iksššən		√k-s-s
78b.	aggu, smoke n.	aggu, pl. aggiwen						√h
78a.			d'dūhān		ddexxan, pl. ddaxen	dduxxan	ədduxxan	Ar
78c.				^{lz} arbub				√r-b-b
78d.							awrasən	√w-r-s
79a. stand	bed	bed = ^p bədd	bedd	^{lz} bedd	bedd	ibədd	ibədd	√b-d-d
79b.	ekker	ekker	ékker					√k-r
80a. star	itri, pl. itran	itri, pl. itran išri, pl. išran	itri, pl. iθrān	^{lz,Sc,K} it'ri	itri, pl. itran	itri, pl. itran	itri, pl. itran	√i-r
81a. stone						aḍyan, pl. iḍyayən	aḍya, pl. iḍyayən	√d-γ-γ
81f.	st taggunt, pl. tant. aggun				taɣunt, pl. tiyuna			√h-n
81e.	azru, pl. izra	ažru, pl. izžra	θazrūθ : azru, pl. izerwān rock	^{lz,Sc,Am} ažru	(ažrar cailloux)			√z/z-r-w
81g.		isəlli						√s-l
81h.			θauqiθ, pl. θiuqay : Wars. θuqiq	^{lz} auqi				√w-q-y
81i.					qabu, pl. iquba			√q-b
81j.					ahžur, pl. ihuzar			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	ē'ūm	^{Am} ^c um	^c um	^c um	^c um	Ar
83b.				^{lz,Sc,Ur,Tz,Bq} eft'ah				Ar
84d. tail	st ašwal			^{lz} hašuwal				Ar
84b.	timyilt, pl. timyilin	timyilt, pl. timyilin					tamqalt, pl. timqalin	√m-γ/q-l
84e.	tabačcat, pl. tibačcatin	tabačcat, pl. tibačcatin						
84f.		eddil						√d-l
84g.		^p abərdud						√b-r-d-d
84h.			θagerbūzt, pl. θi...in θa'ānnābθ, pl. θi...in aθibūr, pl. iθibūren					√g-r-b-z
84i.								Ar
84f.								Ar
84g.				^{lz} abehrur				√b-h-r-r
84h.				^{Ur,Tz} ašugg'aq				√s-w-w-d
84i.				^{Se} azafal				√z-f-l
84j.				^{Bq} nafer				√n-f-r
84k.				^{Am} amuwar				√n-w-r
84l.				^{lu} ašettab				√s-t-b
84m.					tazlalt, pl. tižulal			√g-l-l
84n.						tazəndiqt, pl.		√z-n-d-d

						<i>tizəndad</i>		
84o.						<i>ta^cəttušt, pl. tī^cəttušin</i>		√ ^k -t-š
85a. that	<i>yuan</i>	<i>ewan</i> P wan : tan	<i>win</i>	¹² win	<i>wenn</i> tenn	<i>wən : tən</i> wən : tən	<i>wən : tən</i>	√w/t-n
86a. this	<i>yvad</i>	<i>wad</i>	<i>wu</i>	¹² wu; ^R wami ^{Sc} wad'a m. : t'uit'ait'ad'a	<i>wu : tu</i>	<i>wu : tu</i>	<i>wu : tu</i>	√w/t(-d)
87a. thou	<i>keyin</i> <i>xemmin</i>	<i>šeggin</i> <i>šemmin</i>	<i>šekk</i> <i>šemm</i>	^{R,12} šek ¹² kedži	<i>cekk</i> <i>cem</i>	<i>šakk(in)</i> <i>šamm(in)</i>	<i>šacč</i> <i>šamm</i>	√k-y(-k) √k-m
88a. tongue	<i>il(e)s,</i> pl. <i>ilsawen</i>	<i>il(e)s,</i> pl. <i>ilsawen</i> P <i>irs</i>	<i>iles,</i> pl. <i>ilsān</i>	^{12,Sc} ils	<i>iles, pl.</i> <i>alsawen</i>	<i>ilas, pl.</i> <i>ilsawən</i>	<i>ilas, pl.</i> <i>ilsawən</i>	√l-s
89e. tooth	<i>taxost,</i> pl. <i>taxsin, cf.</i> <i>ayos,</i> pl. <i>oxsan</i>	<i>taxost,</i> pl. <i>toyresin</i> cf. <i>ayos,</i> pl. <i>oxsan</i> molar P <i>uxs</i> tooth						√y-s
89f.				^{Sc} aqarruš				√q/k-r-š; cf. #7a
89b.						<i>ugəl, pl.</i> <i>uglan</i>	<i>uğəl, pl.</i> <i>uğlan</i>	√g-l
89c.		<i>taymest,</i> pl. <i>tiymas</i>	<i>tīymest,</i> pl. <i>tīymās</i>	^R t'iyemest	<i>tiymess, pl.</i> <i>tiymas &</i> <i>aymasen</i>	<i>tiyməst, pl.</i> <i>tiymas</i>	<i>tiyməst, pl.</i> <i>tiymas</i>	√y-m-s
90a. tree	<i>essežret,</i> pl. <i>essežrat</i>	<i>essežret,</i> pl. <i>essežrat</i>	<i>sežžerθ, pl.</i> <i>sežžūr &</i> <i>θisežrin</i>		<i>ššəžrət</i>	<i>ššəžart</i>	<i>əssəžrat</i>	Ar
90d.		^P axliff						
90e.				<i>iylef</i>				
90f.		^P asəklū		(^{Bq,Am} asekrū big tree)				?√s-k-l
90g.				^{Bq,Am} elyars				Ar
91a. two	<i>sin</i> <i>sunt</i>	<i>sin = ^Psin</i> <i>sunt = ^Psna</i>	(<i>sén yirğāzen</i> 2 men)		<i>senn m.</i> <i>sent f.</i>	<i>sən : sənt</i>	<i>sənn m. :</i> <i>sənnat f.</i>	√s-n
91b.			<i>θnāyen</i>	<i>t'nayn</i> ^{12, Bq, Am}				Ar
92c. walk			<i>əyyūr</i>	<i>uğūr</i>	(<i>u</i>)yur		<i>iğūr</i>	√-ww-r
92f.	<i>eddu</i>	<i>eddu = ^Pddu</i>		^P eddu		<i>əddiw</i>		√d-w
92e.			<i>rōh</i>	^{R,12} rūh	<i>rah</i>			Ar
92h.						<i>əkk</i>		√k
92i.						<i>iyya!</i>		√y
92j.							<i>əzwa</i>	√z-w
92k.				^{Sc} sir			<i>əsta</i>	Ar
92l.					<i>qsed</i>			Ar
93b. warm	<i>ihman</i>	<i>ihman</i>	<i>yehmān</i>	¹² ehma	<i>hma v.</i>	<i>əhma</i>	<i>əhma</i>	Ar
93d.	<i>iryan</i>	<i>iryan</i>						√r-y, #12a
93e.						<i>ədfa</i>		Ar
93f.							<i>əsxən v.</i>	Ar
94. water	<i>aman</i>	<i>aman</i>	<i>āmān</i>	^{12, Sc, R} amān	<i>aman</i>	<i>aman</i>	<i>aman</i>	√(y-)m
95. we	<i>nekkeni</i>	<i>nikni =</i> P <i>nukni</i>	<i>ne(t)šnīn</i>	^{Sc} nekkni ^R neššin ¹² neččin	<i>necni</i>	<i>nəššin m.</i> <i>nəšninti f.</i>	<i>nəšnin</i>	√n-k-n
96. what	<i>ma(t), matta</i> <i>mīt</i>	^P may	<i>māges</i>	¹² māin		<i>ma, matta</i>	<i>matta, b°</i>	√m(-y/t)
97a. white	<i>imellulen</i>	<i>imellulen =</i> P <i>aməllal</i>	<i>aməllāl</i>	¹² aməllāl	<i>aməllal</i>	<i>aməllal</i>	<i>aməllal</i>	√w √m-l-l
97b.	^{Sc} amazī							√m-z-y
98a. who	<i>ma(t), matta</i>	^P may	<i>matta</i>	^{Mc} min	<i>may</i>	<i>mammū</i>	<i>man-ay-u</i>	√m(-n/y)
98b.							<i>wi</i>	√w
99a. woman		<i>tameṭṭut, pl.</i> <i>timeṭṭat &</i> <i>timeṭṭutin</i>	<i>tamṭṭūt</i>	^{R,12} t'aməṭṭūt	<i>tameṭṭut</i>	<i>tamaṭṭut</i>	<i>tamaṭṭut</i>	√m-ṭṭ
99b. pl.		<i>tisednan</i>	<i>θiseḏnān</i>	pl. t'isednān	<i>tisednan</i>	<i>tisədnan</i>	<i>tisədnan</i>	√s-d-n
99d. pl.		<i>taiči</i>						
99e.	<i>tamyart, pl.</i> <i>timyarin</i>			^{Sc, Am} t'amyart				√m-y-r; cf. #5a
99f.				¹² t'wašunt				√k-n
99g.					<i>zzukellu arg.</i>			

On classification of Berber

100a. yellow	<i>ireyen</i> = <i>^sāuray</i>	<i>iwereyen</i> = <i>^rawray</i>	<i>iurāyen</i>	<i>^{iz}auray</i>	<i>awray</i> , pl. <i>iwrayen</i>	<i>awray</i>	<i>awray</i>	$\sqrt{w-r-y}$
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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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Figig: Kossmann 1997.
Kabyle: Dallet 1982 & 1985.
Matmata: Destaing 1914.
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Rif: Biarnay 1917; Justinard 1926; Lafkioui 2007; McClelland 2004; Renisio 1932.
Sened: Provotelle 1911.
Šawiya: Basset, André 1961; Masqueray 1879.
Šilha / Tašelhait: Cid Kaoui 1907; Stumme 1899.
Tamazight: Cid Kaoui 1907; Penchoen 1973.
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