

Once more about glottochronology and the comparative method: the Omotic-Afrasian case

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"The large Data Base (76 pages)... can be used to check on my analyses or conclusions or to make some of your own. The cognate decisions are based on my best knowledge of Afroasiatic... I believe that most of the proposed cognations are accurate. Like Joe Greenberg I think you can look at an assemblage of data like this for 36 languages for an hour or so and reach rough and ready conclusions about classification."

"How does a reconstruction prove something?... Or what do we know about the validity of a language classification after a reconstruction that we didn't know before the reconstruction? Can reconstruction or the statement of "sound laws" take place in the absence of the original etymologies of the original classification? Is reconstruction anything else than a way of spelling out or elaborating on the original etymologies? Finally, can a poor, lousy or otherwise inadequate reconstruction - such as recent ones in Afrasian - really be a valid test of a genetic relationship?"

"What I am opposing is the sweeping over-simplification of our work called proof by reconstruction. It is basically an Indo-Europeanist invention... and a dogma held by Russian historical linguists long after its usefulness had expired."

"...there were independent centers of inquiry which did not automatically genuflect before Indo-Europeanism... back in the 1950s there was a strong and healthy Americanist tradition, in which Kroeber, Sapir, Swadesh and Greenberg participated... How much of that progress do you think they would have made if they had been brain-washed in I-E theory and methods, like the current generation of timid souls?"

"Sergei (Starostin - A. M.) seemed to lack a distinction between lexicostatistics and glottochronology; they are like Siamese twins but they have been separated successfully without killing either one - in American thinking. One can be used for sub-classification or internal taxonomy while the other is used for dating... Otherwise you have no control over borrowings and look-alikes..."

"In empirical science testing of or confirmation or rejection of hypotheses are not matters of mathematical proof but rather of confrontations with the data, reality, facts, or whatever you want to call the empirical aspects of things."

"Having gotten 1% or 0% or 0.9% or 1.8% and such like between the extremes of Afrasian, I bore the general conclusion of 'zero to one percent' ... As I said several times in Santa Fé, proto-Afrasian is at least 20,000 years old and by one reckoning 30,000 years old."

"...one misjudged cognate scoring can distort results".

"I see you guys heading for a paradigm of shallow prehistory while everything about the whole scene screams "older, older!" at me. So I am bound to argue the point with you. If we are unable to agree, perhaps we can find some tests or natural experiments which can help us resolve these disagreements. In any case we are not in a love affair; this is an affair of the head!"

(Harold Fleming.

Excerpts from Letters to Murray Gell-Mann,
Sergei Starostin, Merritt Ruhlen, Christopher Ehret. 2002)

These letters are formally addressed to other people, not myself. However, they present a challenge not only to the "Russian historical linguists" (or, in other words, to the Moscow "Nostratic" school of distant language relations headed by Sergei Starostin) in general, and to Starostin with his version of glottochronology ("Sergeichronology" as Hal Fleming puts it), in particular, but also to myself, with my Afrasian classification based on this version, my dating proto-Afrasian to the 9-10th millennia and placing the proto-Afrasian homeland in the Levant rather than in Africa. So the present paper is my reply to H. Fleming's letters - a reply to which Hal is obviously calling his opponents.

I

If I chose to abstain from this polemics for years it was not because I did not have any questions to pose to Fleming and some other fellow Afrasianists, but because the answers to these questions seemed too evident. I kept saying to myself: "The Afrasian dictionary of which you were one of the main authors 20-25 years ago was also full of things now unacceptable to you. Other people's approaches that are so different from yours are their own business. You must be grateful for the opportunity to use the invaluable data they collect and publish, while nobody prevents you from

having your own way of seeing and describing things." However, Hal Fleming's letters proved to be the proverbial "last drop". And it was not really because of his criticism of "Russian historical linguists" to whom I have the honor to belong. I appreciate and accept any seriously argued criticism of my studies regardless of whether it hurts my professional ambitions.

What I am actually opposing, to use Fleming's own formula, is the *over-simplification* of our work, called "method of mass comparison" - a method that disregards reconstruction and sound laws and implies that *like Joe Greenberg you can look at an assemblage of data like this for 36 languages for an hour or so and reach rough and ready conclusions about classification*. I am afraid this approach is shared by many linguists outside old school Indo-Europeanists as well as a small Moscow school currently headed by the addressee of this Festschrift. I am not denying mass comparison as a first rough approximation to classification, but it differs from the established comparative method the way the work of a wood-cutter differs from that of a jeweler. Besides, not everyone can work "like Joe Greenberg". Joe Greenberg had the intuition of a genius, which helped him make his African and Eurasian classifications; but he also had a brilliant knack for making use of such underestimated linguistic phenomena as typology or compatibility of root consonants.

I firmly believe that any research in the area of comparative linguistics or etymology can only be truly successful if one rigorously observes certain principles. In my case, they do not stem from some sophisticated linguistic theory or even from the Indo-Europeanist tradition (my knowledge of which, frankly speaking, is rather vague), but from common sense and more than thirty years of practical work. These principles are as follows:

(1) all the data used for comparison must be well documented, i. e., provided with accurate references to the sources used (I am unfortunate to say that 20 years ago I myself followed that principle rather loosely). This rule is often not observed even in Semitic, to say nothing of Afrasian studies;

(2) toying with isolated etymologies is fun, but it does not allow the etymologist to advance from the level of guesses and hypotheses to that of proof: unlike Fleming, I do believe in reasonable arguments and valid tests in my science - otherwise I would have chosen a different one. Etymologies, except for certain exotic instances, should be based on regular sound correspondences and coherently reconstructed proto-forms, with all the controversial and problematic cases openly evaluated and discussed (the

principle my co-author Leonid Kogan and myself follow in our Semitic Etymological Dictionary); really solid, comprehensive argumentation should be presented in the form of a professionally compiled comparative/etymological dictionary representing the bulk of the compared languages' lexicons;

(3) sound correspondences are reliable only when confirmed by sufficient lexical data; deviant cases must be explained by special rules, and all the phonemes - in the case of Afrasian, primarily consonant phonemes - attested in each individual language must be compared and presented in the tables of sound correspondences;

(4) separation of loanwords from the inherited lexicon is not only indispensable, but must be supported, whenever possible, by precise references to the source words, and explicit argumentation, both linguistic and cultural-historical;

(5) semantic comparison should be at least based on some sort of common sense; the less similar are the compared meanings, the more they need confirmation by other examples of similar meaning shifts;

(6) without observing the above principles no final conclusions can be made either on the genetic classifications and the dating of our proto-languages or on the features of human societies who spoke them and the location of their homelands - all those correlations with archaeology and genetics we are so anxious to establish.

Let us briefly review the Afrasian field outside Semitic. There are practically no works meeting all or even most of the above requirements. There is a more or less accurate reconstruction (subtitled "A First Approximation", regrettably never followed by a second one) of the consonant system of a large language group, containing some 300 proto-forms, where even two thousand would hardly be enough. There is a small group of well-documented languages of crucial importance for whom vocalic correspondences are claimed to have been established while the consonant ones are still obscure; plans to compile a comparative dictionary were reported at least 20 years ago (a year of hard work for a professional, and the only established expert in these languages *is* a professional). At the same time, there is a huge whole-family comparative dictionary full of new and ingenious cognations, but compiled so hastily and carelessly that the main problem of a reader (myself) is to tell incorrect quotations (naturally, with no references) from mistakes and slips. Both in this dictionary and in a more recent etymological dictionary of an ancient language, tables of correspondences contain, instead of reflexes of proto-phonemes in individual

languages, only starred reconstructed phonemes of group/branch proto-languages, which makes them useless for any practical purposes (what use is, say, Agaw *ɣ if you cannot find anywhere a reliable set of its reflexes either within the Agaw group or outside sustained by sufficient lexical data?).

Another author, one of the most hard-working in the field, includes into his table of correspondences only half of the consonants of Dahalo, the phonetically richest Afrasian language. And the merits of yet another comparative study containing unique data and a good deal of convincing sound correspondences is counterbalanced with improbably sophisticated proto-phonemes and apparently an unbridled imagination of the author who relates the words meaning 'armpit' and 'to thatch roof' ("armpit is a covered area of the body"); 'forest' and 'thirst' ('waterless place, desolation' as the reconstructed proto-meaning); 'woman', 'small' and 'few'; 'to take, marry' and 'thumb'; 'pregnant', 'molar tooth' and 'to spread out'; 'widow' and 'thief' ('to impoverish' as the proto-meaning); 'to sink', 'knee' and 'egg'; 'churning calabash' and 'to know'; 'mane' and 'callus'; 'sugar cane' and 'to be sad'; 'log' and 'old cow'; 'to brand cow', 'God' and 'soot' (with 'to scorch, to sear' as the proto-meaning); 'be, become', 'fresh milk', 'to sprout' and 'God'. Not to mention some of the dictionaries of individual languages with an insane alphabetic ordering of lexemes, where finding a word requires a special investigation, and with many words given no other explanation than 'Ariangulo', 'Bajuni', 'greenbul' or 'large pupa' (what on earth is a *small* pupa, I would like to know?).

However, Fleming's diagnosis of the recent state of reconstruction in Afrasian as "*poor, lousy or otherwise inadequate*" seems to me somewhat aggravated. I would have called it "stagnant", if not for a series of most recent studies with a somewhat less arbitrary approach to etymology and reconstruction. In any case, both of us, Fleming and myself, must be also held responsible for a rather lamentable state of the arts in our field of study. Everything is relative in this world; we may, however, console ourselves with the thought that Afrasian comparison is more elaborated than Nilo-Saharan, Niger-Congo, Australian, Indo-Pacific or Amerind, although there is little doubt we are lagging behind the North Caucasian and Altaic comparison now that Starostin and his co-authors have published respective etymological dictionaries.

And, of course, we are way behind Indo-Europeanists. Incidentally Fleming's attitude toward "Indo-Europeanism" strangely reminds me of the attitude of Soviet mass media toward the United States - a fetishist

attitude with a negative value. However, analyzing his reasoning, I came to the conclusion that what Fleming means by "Indo-Europeanism" for me is merely a synonym of "good work": reconstruction, sound laws, and a mistrust towards suggestions to *look at an assemblage of data for 36 languages for an hour or so and reach rough and ready conclusions about classification*. Actually, I am not sure Indo-Europeanists' work always deserves so much credit. We all know that to err is human, and, if I were Fleming, I would not risk going so far in my self-confident criticism. Instead, I'd try to be more objective about my own competence and more wary of taking on so many languages lest I should commit such mistakes as:

- Eg *mʔz-t* and *myz-t* 'liver' quoted as *mʔst* (ignoring the well-known fact that *Wörterbuch der ägyptischen Sprache* conventionally uses *s* to render the voiced sibilant [z] while the voiceless [s] is rendered by graphic *š*) and scored differently from Male *mayzi* 'liver', its undoubted cognate; that it is not a slip ensues from yet another example: Eg *z(y)* 'person' (quoted by Fleming as *z/s*) is scored (as if it were *s*) together with Mao *eesâ* and similar Omotic forms (<*ʔis-, rel. to Sem *ʔiš-);

- Akk *eššu* 'new' is scored differently from Amh *addis*, though both are from Sem **had(i)t-*;

- Akk *šamn-um* 'oil, fat, cream' is quoted as 'red', which is *sām-* in Akk.;

- Jib *gôd* is scored with Amh *ḵoda*; to do that one must be completely unfamiliar with "sound laws" as well as specific information adduced in the dictionaries: Jib *gôd*, pl. *gížéd* (<**gilad-*) is <**gild-*, to be scored with ArabSyr *žild* <**gild-*, having nothing in common with Amh *ḵoda* (cognate with Argobba *ḵoda*, Gafat *ḵodä*, Eža Muher *ḵwāda* 'skin' and further with Arab *ḵadd-* 'skin of a new-born lamb or kid');

- Amh *žoro* 'ear' is scored with Or *gurra*, which is the source for the Amh loanword;

- Tuar *ihaggayen* (by Tuar I mean the Ahaggar dialect - see below) is scored differently from Siwa *azgay*, Izd *azuggway*, though the Ahg word is <**hawway-* (*ihway* 'be red') and all the three are <**zawway* <**zawḵ* implying a common score with Male *zoḵe* (cf. Oyda *zoḵo*, Bencho *zōḵə*) overlooked by Fleming;

- Tuar *ṛaim* (a long outdated French way of rendering *ṛ* as *r*; *ṛaym* is the correct form) 'sit' is scored differently from Siwa Izd *qim*, all <**ḵaym*; a synonym for 'sit' in Tuar is quoted as *assis*, a phantom word, which is in fact the French 'assis');

- Izd *a-ryaz* 'man' (<**a-rgaz*, *-*g* regularly > Izd *-y*) is scored with Tuar *a-lâs* <**a-haləs*;

- Kiir *kwor kwota* 'louse' is a loan from Hs *ḵwarkwatā* (<*ḵ^war-ḵ^wat-, cf. *ḵwaro* 'insect'), and not cognate with it.

There are hundreds and hundreds of similar mistakes in FI, even in those languages where Fleming is in fact one of the leading experts - Cushitic and Omotic. Here's just one example:

- Gwt *ʕakkad* 'sit' is scored with ArabSyr *ḵaʕad*, although we know that in the Dullay group of East Cushitic to which Gwt belongs, -*Vd* is a current verbal suffix (cf. Dobase *gup-ad-*, Harso *gup-ad-* and *gup-* 'to build'; Gwt *ḵeʕid-* and *ḵaʕ-* 'to fly'), so Gwt *ʕakk-ad* has nothing in common with Arab *ḵʕd*.

Let us take at random one of the 100 word list items - 'warm'.

One of the two Akk terms cited by Fleming is *ḵumt-*, which is actually not the adjective 'warm' required by the lexicostatistical procedure (which, as far as I understand, Fleming in general accepts) but the noun 'heat, fever', not to be scored at all; however, it is scored "d", same as ArabSyr *ḵmu*. The latter, on the contrary, is cognate with another Akk term *emm-*, the main word for 'warm, hot' (not cited by Fleming) <*ḵ^mmm. Neither Akk *ḵumt-* nor ArabSyr *ḵmu* has a single consonant common with Jib *hub*, also scored "d" (besides, it is also a noun meaning 'warmth, heat', not to be scored at all; *ḵhān-un* is the Jib adjective for 'warm', not cited in FI, v. JJ 264).

One more term marked "d", Izd *ḵmu*, should not be scored as it is an obvious loanword from Arab. Then, Fleming gives no term for Mkk though it is quoted in JMkk 194 as *wèʕini* and is cognate to Tum *wāy* (scored "l"). He scores Hs *zāfi* as "h?" and ArabSyr *dafi* (< Sem **df?*) as "h" while they are actually not related, as Sem **d* does not correspond to Hs *z*. Finally he scores as an "x" Dah *búgubúgu*, qualified as a loan in EEN 44.

Such mistakes, while pardonable in a pioneer etymological study, are fatal, when met in such numbers, for lexicostatistics and glottochronology where every choice of lexeme or etymological decision affects the results of classification and dating. Of course, Fleming's formula "...one misjudged cognate scoring can distort results" is too rigoristic. A modest percentage of mistakes is both inevitable and statistically irrelevant. I am sorry to state it is certainly not so in Fleming's case when mistakes reach 40% (see below).

I wonder whether these mistakes are accounted for by carelessness or a consciously applied *method of mass comparison* neglecting regular correspondences, sound laws and morphemic segmentation. I would prefer Fleming's case to have been carelessness as I see it as less dangerous. I also realize that some of Fleming's data I am reviewing remain unpublished, so the demands should not, of course, be too severe. However, to quote

Fleming, this Data Base "can be used to check on my analyses or conclusions or to make some of your own"; besides, I see practically no difference in the quality of etymologizing between the unpublished study discussed in the present paper and the previous publications of my opponent. (I must stress that this critical judgement does not concern his invaluable pioneer field work in Omotic and Cushitic languages).

That said, I am grateful to Hal Fleming for sharing his unpublished data with Starostin (and, indirectly, with me), thus stimulating this study. I have greatly benefited, too, from Vaclav Blažek's manuscript containing 100-word lists for most Cushitic and Omotic languages and his several unpublished papers on Cushitic, Omotic and Ongota with etymological comments, which he also generously shared with Starostin and myself. My special thanks are due to Olga Stolbova whose expert and time-consuming consultations in Chadic etymology helped a great deal; without her assistance my selection and etymologization of the Chadic forms, often different from Fleming's, would have been much less reliable, considering that etymologizing and reconstruction in Chadic are far more difficult than in any other branch of Afrasian. I am also indebted to Leonid Kogan for his constant consultations in Semitic etymologies and choice of terms for the 100-word list, and to Sergei Starostin for both a never-ceasing improvement of his glottochronology method and computer database technique which I rely on, and our numerous discussions on linguistic matters.

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Fleming's 100-word list contains some 2.100 etymologies (the sum total of forms united by a common score within each item of the list). The total number of our differences in scoring, including what I treat as unrevealed and false loanwords, forms not confirmed by reliable lexical sources or having unacceptable meanings, and cases of wrong etymologization is over 800, that is, 40% of Fleming's etymologies. These are cases I am more or less sure of. There are also over 500 debatable cases where my decisions seem to me preferable to Fleming's scores; these make up about 25% of Fleming's etymologies.

This is my answer to my opponent's question: "...what's wrong with what I do or where have I made my mistakes or whatever?". The qualified reader

may judge for himself or herself who, and to what degree, is right or wrong in this controversy.

II

The many cases of differences between Fleming's scoring and mine can be conventionally divided into four groups.

Group One includes around 60 terms whose meaning is different from the one required for the corresponding item of the 100-word list ("dominant forms per meaning" as Fleming put it) by the lexicostatistical procedure, according to which they should be replaced by the forms that do have that required meaning. Several examples: for 'ashes' Fleming adduces Eg zz (zz.w is the correct form) 'dust', quoted in EG III 474 with a question mark, to be replaced by *itnw*, attested in Med with the meaning 'ashes'; for 'lie', Akk *n?h* (*nâhu*), actually meaning 'to rest', to be replaced by *niálu* 'to lie'; for 'stand', Jib *ʕéss*, meaning 'to get up, rise', to be replaced by *sor* 'to stand'; for 'bark', Siwa *ssuak*, meaning 'kind of nut-shell' (Lao, the term for 'bark' absent). This group also includes nearly 50 examples cited by Fleming but either absent in available sources (when I have serious reasons to believe that such an example does not exist at all) or adduced in such a shape or transliteration which makes it impossible to identify (e. g. Eg *awi* 'all'). If we add 15 terms lacking in F1 but well attested in corresponding sources, part of whom have cognates in other languages represented in Fleming's list, we will get over 120 cases of disagreement between Fleming and myself.

Group Two consists of 61 loanwords (or what I consider loanwords giving my reasons or referring to corresponding sources), which Fleming scores other than "lw.", treating them as inherited terms. In accordance with Starostin's method loanwords should be eliminated from the scores (Swadesh paid no attention to this problem), a principle Fleming does not seem to deny; naturally they should be replaced by inherited terms with the same meaning wherever available, e. g.: Dah *mawiiŋgu* 'cloud' scored "q" is marked as a loanword from Swahili in EEN 37, *ŋgúmine* being the inherited term in Dah likely related to Sidamo *goma* and Wolayta *guma*. A small subgroup is made of 4 more terms marked "lw." by Fleming which I consider inherited lexemes. Altogether there are 65 cases.

Group Three contains differences in etymological evaluation ("cognate scoring" as Fleming puts it). They may be divided into three subgroups:

(a) debatable etymologies, over 500, where my choice seems to me preferable to that of Fleming (a short argumentation is always adduced). Several examples: I deduce Kiir *wasâm* 'foot', scored "i" in Fl, from W. Ch **ʔasam-* (Jimi *assam*, Miya *ʔsúmá*, etc.), very likely met. rel. to Maʔa *saʔamu* scored "q" in Fl.; I am inclined to treat Yaaku *risin* 'hair' (scored "p" in Fl) as going back to **riz-in-* < AA **riʔ/ʕ-* and relate it to Had *odda* (scored "q") which I presume to go back to **ʔord-* < Cu **ʔV-rVʔ/ʕ-* (cf. Kambatta *orza-t*, Burji *orda* id. and Dah *ráqā-ne* 'feather');

(b) cases of what I consider wrong etymologies while realizing why this or that mistake was made by Fleming (my counter-argumentation is adduced). The total number of misjudged cognate scores counting between every pair of languages amounts to almost 600. Only a couple of examples: Siwa *žar* 'belly' is scored differently from Or *gáraʔ* because Fleming is probably unaware that Siwa *ž* continues **g*; Akk *ešem-tu*, Amh *ʔaʔont* and ArabSyr *ʔazam* 'bone' (<Sem **ʔaʔm-* <AA **ʔaʕm-*) are scored with Jib *ʔizéʔ* (in Fleming's notation) looking very much alike, though the latter is a different root, since *ʔizéʔ* (the correct form, v. JJ) goes back to **ʔiʕaʕ-* <AA **ʔiʕaʕ-* (see SED Nos. 24 and 25), which makes three wrong scorings - between Akk and Jib, Amh and Jib, and ArabSyr and Jib;

(c) cases (nearly 70) of what seems to me to have been Fleming's slips of pen (or, rather, computer), when I see no ground at all for equal scoring, e. g. Dah *gāno* scored with Bil *bahar* or Mao *kêmê* scored with Or *gúddaʔ*.

Group Four consists of items, mostly pronouns, which I treat, unlike Fleming, as compound terms giving each of the components its own score (resulting in two or even more scores given to one and the same term). For example, I treat Jib *denu* 'this' as a compound pronoun consisting of two elements - *dV-* and *-nu*, scored because of its *dV-* element with ArabSyr *hāda/hādi* (<**ha-dā*), and because of its *-nu* element, with Kiir *nani*, Hs *nnan*, a: Mnd (*bo*)-*na*, Gis *hana*, Beḏ *un/t-un*, etc. I chose this palliative method after much hesitation, fully realizing its vulnerability; however, all the other scoring approaches I have applied to various similar cases seem to me even worse. Of course, in such cases my scores are highly debatable and cannot serve as strong arguments in my dispute with Fleming.

Analyzing Fleming's procedure

"The process is clear enough, as follows:

First, select the phylum to be dated. Choose by the quality of work done on it.

Second, select specific languages to represent most or all salient internal taxa.

Third, set out the data in terms of dominant forms per meaning, noting borrowings.

Fourth, reckon cognation as between forms in all languages, i. e., score the cognates.

Fifth, count the cognates found between any two languages and obtain a percentage.

Sixth, look up the chronological value for any given percentage."

(quoted after Fleming's letter)

Comments on the first and second steps:

Having selected the languages Fleming, in several cases, does not take any advantage of the "quality of work done" on them. Instead of standard, updated and reliable sources, he often seems to consult outdated or marginal ones. Thus, in Old Egyptian such forms as *awi* for 'all', *geg* for 'bark', *aat* for 'yellow' are presented in a kind of transliteration not used in established Egyptological sources, first of all in the "Wörterbuch der aegyptischen Sprache" by Erman and Grapow (EG) and "A Concise Dictionary of Middle Egyptian" by Faulkner. Other examples: these dictionaries quote *mṛḥ-t* as 'Salböl' (EG) and 'oil, grease' (Faulkner), but not as 'fat' (Fl); they quote *nmḫ* (not *nm* as in Fl) as 'schlafen; im Todesschlaf liegen' (EG) and 'go to sleep' (Faulkner), but not as 'lie' (in the standard Swadesh list) or 'lie down' (in Fl); I wonder where Fleming took the alternative forms from.

Comments on the third step:

Section III below contains dozens of cases of non-dominant or wrong forms per meaning and unnoted borrowings, as well as debatable cases of what is considered to be borrowings by Fleming and inherited forms by myself.

Comments on the fourth step:

See (in Section III) hundreds of cases of wrong cognation and debatable cases of our differences in cognation.

Comments on the fifth step:

Fleming's statement about the percentage of cognates between Omotic and "North Afrasian" ("*Having gotten 1% or 0% or 0.9% or 1.8% and such like between the extremes of Afrasian, I bore the general conclusion of 'zero to one percent'*") seems to run counter even to his own scores. The number of cognates between Male and all North AA (Eg/Copt, Sem, Brb and Ch), and

between selected Omot and North AA languages, according to Fleming's scores, is as follows (see Section IV): Male-Eg 2, Male-Copt 2, Male-Akk 3, Male-Jib 2, Male-Amh 4, Male-ArabSyr 2, Male-Tuar 3, Male-Siwa 1, Male-Izd 3, Male-Mkk 1, Male-Tum 2, Male-Kiir 2, Male-Hs 1, Male-Mnd 1, Male-Gis 1 & 1 debatable; Ong-Eg 2 & 2 debatable, Ong-Akk 3, Ong-Hs 2; Shin-Jib 4; Mao-Hs 2 & 1 debatable; Dime-Copt 3, Dime-Amh 1, Dime-Izd 3, Dime-Hs 2. Considering that the lists for most of the languages contain less than 100 items (because of borrowings and lack of words), the percentage of cognates will be still higher - between two and three. The average percentage I obtained is much higher - from five to six (see Section IV).

Comments on the sixth step:

See the resulting genetic tree of Afrasian with dates indicated according to my scoring and Starostin's formula.

Analyzing Fleming's data

Fleming adduces diagnostic lists of 37 languages, out of which I have omitted what Fleming calls Neo-Aramaic (Targum) and Ik (Nilo-Saharan). I have analyzed only those items which make the standard Swadesh 100-word list adding No. 62. 'not' omitted by Fleming. In Section III I have commented only on those cases where there is disagreement between Fleming and myself. The 35 languages are as follows:

Egyptian

1. Old Egyptian: unreliable sources seem to be used; in several cases, there is a confusion of forms containing graphic *s* which affects the scoring (see above). Confusion of symbols, unfortunately, quite common for Afrasian studies, is another problem: the same Eg consonant is rendered in Fl as *d* (traditional notation for Egyptology), *ḏ* (a "modernist" way) and *j* (sporadically also renders [y] in Fl), e.g. Eg *j;ḏ* 'leaf' (Fl) instead of NK *ḏb;* and Med *g;bt* (EG) <*g;b or *gb>.

2. Coptic: the dialect is not specified. The data points to Sahidic, although inconsistently: thus, Copt *?uphaḏi* 'liver' is a Bohairic word (there is no term for 'liver' in Sahidic in Vyc). In many cases, well established Egyptian-Coptic etymologies are ignored, e. g.: Copt *klo?l-e* 'cloud', scored "c", in fact continues Dem *ḳlḳl, ḳll* and Eg *ḳri* scored "b" (Pyr *ḳrr*, MK *ḳry*) <*ḳVIVl (Vyc 76); Copt *lōks* 'bite' is marked "lw.", though it continues late Eg

nsk (Vyc 96); Copt *žo* 'head', scored "a", in fact continues not Eg *tp*, also scored "a", but *d;d*; scored "s"; Copt *emašo* 'many' (also *m-ašo*) scored "c" continues Eg *ʕš*; scored "a" (<AA*ʕVčVr-); Copt *hinēb* 'to sleep', scored "d", is dissimilated from **hinēm* (Bohairic *hinīm*), thus continuing Eg *nmɛ*, scored "b".

Semitic

3. Akkadian: meanings of quite a few forms quoted by Fleming are unreliable as they differ from those adduced in both standard Akk dictionaries, CAD and AHW.

4. Jibbali: forms are quoted indiscriminately from Bit and JJ, probably describing two different dialects (which may account for quite a few differences even in the basic lexicon, e. g. Jib *erqet*, quoted by Fl as 'leaf' after Bit 13, is represented in JJ 292 as *érékt* 'sheet of paper'; *tefl* 'leaf' in Bit 65 is missing in JJ). Several forms are quoted neither from one of these Jibbali dictionaries nor from Nak, the only three large lexical sources I know of (e. g. none of them contains *kezzem* 'cold' or *gušun* 'dry'), but from a source I cannot identify. Quite a few obvious Arabic loanwords are scored as if they were inherited words, e. g. *hut* 'fish', *nafs* and *?ensí* 'person' (besides, the latter is not 'person', but the adjective 'human' JJ 4 - 'menschlich' Bit 13).

5. Amharic: several clear Cushitic loans (I am not speaking here of debatable cases) are treated as inherited terms, e.g. 'ear', 'fat', 'feather', 'tail'.

6. Syrian Arabic. As in many other cases, inter-Semitic correspondences are ignored, e. g. Fl regards ArabSyr *tumm* 'mouth' scored "b" as a continuation of *fumm* relating it to Akk *pû-*, Amh *af* and the similar terms scored "b", while *tumm* is <**tumm-* (cf. Jordanian Arabic *timm*), probably to be compared to Had *suume*, scored "j" (both forms perfectly fit into each other and AA **čumm-*, although, each of them being isolated in its language group, they can as well be look-alikes).

Berber

7. Tuareg: the language is not specified; considering that the percentage of inter-Tuareg cognates within the 100-word list is approximately the same as of inter-Slavic or inter-Romance ones (I date the Proto-Tuareg split as having taken place in the 4-5th century AD), to produce a "Tuareg" list is the same as to produce an indiscriminate "Slavic" or "Romance" list (not "Proto-Slavic" or "Proto-Romance"!) without specifying the exact language. This creates a major confusion that affects the scoring: such forms as *a-hāni* 'blood', *həḡr-ət* 'long', etc., containing *h* (<**z*), unambiguously point to

Ahaggar/Tahaggar, while other forms like *emen* 'fish', not used in Ahg (see Fouc 1207), point to different Tuareg languages.

8. Siwa: quite a few forms are quoted not after Lao, but after other sources - alas, without any references - that I am unable to identify; however, judging by such examples as *bitin/bâttin*, *tin* quoted as 'who?' (these are in fact relative, not interrogative, pronouns), or *ssuak* quoted as 'bark' (actually 'kind of nut-shell' according to Lao), I am afraid these sources are either unreliable or maybe even fictitious.

9. Ait Izdeg: several evident Arabisms are scored as inherited words, e. g. *ḥmu* 'warm', *raʔa* 'see', *aʔari* 'mountain' (*aʔari* is the correct form <Arab ʔurʔat - 'mountain top').

Chadic

10. Mokulu, or Mokilko (East Chadic): a number of terms quoted not after JMkk or CLR differ a lot from these most recent and reliable sources, both in form and meaning.

11. Tumak (East Chadic).

12. Kiir (West Chadic): several loanwords are treated as inherited terms, e. g. *gāʒimàre* 'cloud' from Hausa *gaʒimare*; *kwor kwota* 'louse' from Hausa *kwarkwatā*; *namàasi* 'woman' from Hausa *namiʒi*; *pyaŋ* 'moon' (cf. PW Nigritic *-*pian*- CLR I 119); *pyelè* 'new' and *rap* 'two' from Nilo-Saharan.

13. Hausa of Kano (West Chadic).

14. Mandara, or Wandala (Central Chadic).

15. Gisiga (Central Chadic).

Cushitic

16. Beja, or Beɗauye (North Cushitic; considered by some authors a separate branch of Afrasian): in my tree it joins with Agaw, probably due to several unrevealed loanwords (from North Agaw?).

17. Bilen, or Bilin (Central Cushitic, or Agaw).

18. Khamta, or Khamtanga (Central Cushitic, or Agaw).

19. Awngi, or Awiya (Central Cushitic, or Agaw).

20. Boran Oromo (East Cushitic).

21. Arbore (East Cushitic).

22. Hadiya ("Highland" East Cushitic).

23. Gawwata, or Gawwada ("Dullay" branch of East Cushitic).

24. Yaaku (a separate unit of East Cushitic).

25. Dahalo (a controversial position, cf. the title of a paper by Blažek and Tosco: "Between South and East Cushitic: Reconsidering the Position of Dahalo"): in my tree, part of South Cushitic.

26. Mbugu, or Maʔa (the most controversial position; its Afrasian status is clearly confirmed by lexicostatistics, while the grammar is said to be Bantu): in my tree, part of South Cushitic.

27. Iraqw ("classical" South Cushitic).

28. Ongota (considered by Fleming a separate branch of Afrasian and by Blažek, a non-Afrasian language): my tentative results, with reservations about regular correspondences and possible loans, place it with Omotic - specifically with Aroid Omotic (according to Bender's classification).

Omotic

29. Diddesa Mao.

30. Shinasha, or Bworo.

31. Chara.

32. Male.

33. Dizi Adikas.

34. Dime (South Omotic; Aroid, acc. to Bender).

35. Hamar, or Hamer (South Omotic; Aroid, acc. to Bender).

III

Comments on the author's disagreements with H. Fleming (scoring, choice of words, etc.).

1. 'all' \diamond a: Eg *awi* // form transliterated in unusual way and impossible to identify; *nb* and *tm* are Eg terms for 'all'. \diamond c: Akk *kalû*, Jib *kôl*, Amh *hullu*, ArabSyr *kull* // <Sem **k^vall-* = p: Dah *ʔákkàle* < **ʔa-kal-* or **ʔak-kal-*; not = c: Hamar *wull* (**k-* not *>w* or *0* in Hamar), which, in its turn, = lw.?: Aun *ull-k*, also *wullá* (Hamar, Aun and Dasenech *lulli* are rather cognates than loans from Amh *hullu*).

2. 'ashes' \diamond a: Eg *zz* // probably 'dust' ('Staub?' EG III 474) but not 'ashes' (not sc.); anyway, cannot = a?: Tuar *izâd* (*êzəð*, acc. to Fouc); *itnw* Med. is 'ashes' (not in Fl) = s: Ong *tauni*. \diamond c: Jib *riñd* // rather not = c: ArabSyr *rimād-*, but a loan from Arab. \diamond e: Siwa *yirrud* // not in Lao; in any case, looks like an Arabism (*yirrumd*?). \diamond h: Bil *šebar*, Khmt *tsâbir* // < Eth:

Gz *šabal*, etc. LGz 546; anyway, not = **h**: **Tum** *dàbár* < **ta-bar* (otherwise met. < **rVbVd-*, cf. HSA *rúbúđī* 'hot fine ash'). ◇ **c**: **Arb** *romm* // to comp. to **c**: **ArabSyr** *rimad-* only if < **romd*, in which case not a cognate, but a lw. < Arab. ◇ **q**: **Dah** *řibu* // acc. to EEN, < Bantu. ◇ **p?**: **Mao** *púsê* // not = **p**: **Had** *bučča* < **but-*; likely = **l**: **Gis** *a-fc-o* (*fucu* CLR II) < **puc-*.

3. 'bark' ◇ **a**: **Eg** *geg* ?// unusual transliteration: judging by **a**: **Copt** *kūk-e*, Eg (Gr) *kḳ-ty* is meant; possibly rel. to **s**: **Ong** *ʔaḡata* (and *aqata* < **ʔaḳ-at-*; cf. also *qaqqa* [ST], likely borrowed from TSA *qaqqatte* ibid., *kaḳe* SLE) and further to **t**: **Mao** *ḳóḳíšê* (comp. to Moča *óqḳo* in Bla Om implying the primary stem **ḳoḳ-* in Mao; unless < Koman *ḳoḳoš*) and Shin *ḳoḳra* (comp. in Lamb Sh to Gollango *ḳoḳḳe* which implies the primary stem *ḳoḳ-* in Shin; not in Fl). ◇ **c**: **Akk** *ḳulpu*, **Gwt** *ḡofolto* // < **ḳofol-*, met. < **ḳolf-*, neither = **c**: **Amh** *ḳārf-it*, nor **c**: **Bil** *ḳaríf* (lw., v. below), nor **c**: **Male** *ḳurubi* < **ḳurub-* (the Amh and Male forms are neither rel. at least on the PAA level, cf. Tigriñña *ḳārāf* and *ḳorb-āt* 'skin, bark' KT). ◇ **e**: **Siwa** *ssuak* // 'kind of nut-shell' (Lao), not sc. ◇ **h?**: **Hs** *ḥāwō* // < **baH-* (= Bolewa *boi rewe* id.; *rewe* 'tree'), not = **h**: **Tum** *ḥogòón* < **bVHg-* ~ **gVHb-* (cf. Tera *gəbà*). ◇ **c**: **Bil** *ḳaríf* // < Eth (not vice versa, cf. Arab *ḳríf* 'to peel'; v. LGz 441); *ḳāf* is 'bark' (RBil 236) = **m**: **Aun** *qafí*, **Iraqw** *qafí*. ◇ **?**: **Maʔa** // *igome* HRSC 386.

4. 'belly' ◇ **f**: **Tuar** *t-asa* // Ahg *t-esa* = **k**: **Beḍ** *ésse* = **o**: **Maʔa** *mas* (*maso* HRSC 387; likely < *ma-so*). ◇ **g**: **Siwa** *žar* // < **gar* = **m**: **Or** *gáraʔ*, **Arb** *geréʔ*, **Gwt** *karfétto*, **Iraqw** *guraʔ* MQK, *guraʔa* Bl Ms after Dempwolff; all < **g^warʔ/?-* (cf. Arab *žiriʔ-at-*, *žiriyy-at-* 'stomach of a bird'). ◇ **m?**: **Had** *gód-abo* // < **g^wažab-* (cf. Hs *gážēbā* 'kidney' < **gažVb-*); though *-b-* as a fossilized suffix is debatable, rather = **l**: **Bil** *ḡwadug* < **g^waž/žg^w(až/ž)-*, **Khmt** *gizú* (sic! 'belly' in Appl Khm; glossed as 'cuore, fegato' in CR Khm 215), **Aun** *guzg*; certainly not = **m**: **Or** *gáraʔ*, etc.; either the latter or Had has nth. in com. w. **m?**: **Yaaku** *iréh* (a slip?). ◇ **u**: **Dizi** *čōnu* // < **cVn-*? Either rel. to **v**: **Dime** *šíne* or both are lws. < Surma: Meqan *šini* (v. Bla Omot No. 40.3.).

5. 'big' ◇ **i**: **Izd** *ḥatar* // *ḥiter* (vb.), not sc.; *a-moqr-an* is the main term for 'big' = **g**: **Tuar** *amyar* < **ma-ḳar-*. ◇ **n**: **Gis** *madaḍaḅ* // < **ma-dadaḅ-*, likely = **r**: **Aun** *dunguri* (*dəngulí* Bl Ms after Hetzron) < **dung-ur/l-*. ◇ **p**: **Dah** *gāno* // nth. in com. w. **p**: **Bil** *bahar* (a slip?). ◇ **q**: **Maʔa** *ḡilu* // *ḡilu* Mein 309, *-giru* HRSC 386; not = **q**: **Khmt** *ḥiyaw* but = **j**: **Kiir** *gor*. ◇ **r**: **Iraqw** *ur* // not = **r**: **Aun** *dunguri* (a slip?). ◇ **s**: **Mao** *ḳeme* // nth. in com. w. **s**: **Or** *ḡúddaʔ*, **Arb** *ḡuddá*, *ḡudíy-ḍa* (a slip?); the latter forms are likely rel. to Ong *gadaḥ/hune*

'big, many' (Fl Ong 42), *gaddahino* 'big' (SLLE 4), *gaddaṣuni*, *giddeṣeta* 'big, old' (Sava 126) < *gVddaṣ/h- (also related to Dime *gēd* 'big'). ◇ **x**: **Hamar oṅa** // = **o**: **Shin ééna**, **Beḍ wən** (cf. also Janjero *innya*, Somali *wéyn*, Elmolo *wányá*; all < *wany- ~ *wayn-).

6. 'bird' ◇ **b**: **Akk iṣṣūru** // < *ṢVṣṣūr- (Ugaritic ṣṣr), not = **b**: **Jib ʕeṣférót** < *ṢVṣpūr- < *ṢV-ṣVpVr- (Fleming is innocent in this case; relating these two roots is a traditional Semitists' mistake); met. rel. to **p**: **Iraqw ʕirfo**. ◇ **e**: **Tum dērī**, **Mkk ʔot**, **Kiir ʔot**, **Gis ʔiyew** (also Migama *ḏīdú*) // < *dVH(-at)- ~ *dVHdVH-, neither = **e?**: **Mnd giye**, **ʒiye** (see below) nor = **e**: **ArabSyr ʔayr** (the Mnd and Arab words have nth. in com. either). ◇ **j**: **Aun ʕara/ʕāga** // *čáya* Hetz, *čagá* CR Aw; < *č/čak/k-, rather not the same as **j**: **Bil ʒayala**, **Khmt zīla** < *ʒVhVl-. ◇ **a**: **Dime ʔft**, **Hamar atti** // *ap/ft-i* < *HVf-t- = **d**: **Amh wof** < *ṢVp- (Geʕez *ʔof*, etc.), and not = **a**: **Eg ʔpd** (Dime and Hamar -t is not < *-d or *-t; Eg ʔ- is not < *Ṣ-). ◇ **q**: **Ong karbo** // hardly a separate root; either a met. < *kabr- < *kambVr-, rel. to **k**: **Or simpirrē**, **Arb kirma-te**, **Maʔa ʕimero** or a lw. < NS, cf. 'bird' in Bla NS: Nara *karba*, Surma: Kwegu *kubar*, etc.

7. 'bite' ◇ **lw.:** **Copt lōks** // continues late Eg *nsk* (Vyc 96); not a lw. ◇ **b**: **Akk našāku** // < *ntk (Hebrew *nšk*, Geʕez *nsk*, Mehri *neṭk*, etc.); rather to be separated, at least on the proto-Semitic level, from **b**: **Amh nākkāsā** < *nkt (Syrian Aramaic *nkt*, Tigre *nākša*, etc.). ◇ **d**: **ArabSyr ʔadd** // < *Ṣĉĉ, not = **d?**: **Tuar addəd**, **Siwa əddəd** < *Hadd- and **d?**: **Mkk ʔiʔid** < *ʔayVd-, but likely = **r**: **Dizi wāč**. ◇ **j**: **Bil ʔaʔan** // 'to mill' RBil 345 (not sc.) < Sem *ṭṭn; cannot = **j**: **Male ʔaiʔ** (*kwan* is 'bite' in Bil). ◇ **q**: **Dah kaḥ** prob. = **q**: **Iraqw kih** (note that *k*- < *k is irregular), but not = **q**: **Shin šač**, **Chara sač**. ◇ **q**: **Maʔa ne** // -ṅe HRSC 388, likely = **l**: **Aun əṅə-ṅ**. ◇ **o**: **Mao tāsi** // nth. in com. w. **o**: **Gwt ɡaw**, **Yaaku -qau-** < *kaw (a slip?).

8. 'black' ◇ **a**: **Eg km** // neither = **a**: **Had hémača**, **Dah hímmāte**, **Maʔa hame**, all < *hi/am(-at)-, nor = **a**: **Yaaku kumpuʔ**, **Gwt kummay** (< *gumbVṣ-: obeze *kumṣa*, Tsamai *guma*, Bayso *ka-gamb-alli* id.); the Had-Dah-Maʔa are neither rel. to Yaaku-Gwt. ◇ **b**: **Akk adru**, **c**: **šalmu** // *adru* 'sad, dark', not sc.; *šalmu* < Sem *ṭalm- < AA *čal-m-, not = **c**: **Tum dāłmi** (Tum *d* not < *č), but poss. = **o**: **Bil nišir**, **Khmt ničir** (prob. also **o**: **Aun car-ki**) < *ni-čar- < *čal-. ◇ **e**: **Amh ʔəkur** // < Agaw: Waag *şikur*, Aun *šarki*, *carki*. ◇ **i**: **Izd abeḥḥuš** // < *bVḥḥ-uš < *bVḥḥ- (cf. Izayan *a-bəḥḥ-an*) = **l**: **Hs báki**.

9. 'blood' \diamond **a:** Eg *snf* // *znf* (in EG the voiced *z* is conventionally rendered by the symbol *s*) < **zn-f* 'his blood' < **z/3Vn-* = **d:** Tuar *a-heni* < **a-zini* (Ayr *a-zni*, Ghat *a-zoni*) and Hs *žinī* < **žini* (all < AA **žin-*). \diamond **b:** Hamar *zum?* // < AA **3Vm-* (SED 267: Sem, Chad), not = **b:** Akk, Amh, ArabSyr (< Sem **dam-*). \diamond **h:** Ong *šuho* // < **šuḥ-* hardly = **h:** Yaaku *sog'o* (Fl; *sógó* Hei Ya, *soqo* Ehr PC 97; regarded ibid. as a lw. < S. Cu) and **h:** Maʿa *saḥo* (*sako* HRSC CTP. Cf. MEINHOF) < **sak-*; relation to **h:** Chara *sū-ta*, Male *sugu-c* is unclear as the reflexes of **ḥ* in Omot. are not reliably established.

10. 'bone' \diamond **b:** Akk *ešem-tu*, Amh *ʔaʔənt*, ArabSyr *ʔazam* // < **ʔaʔm-*, not = **b:** Jib *ʔizéz* (ʔíʔéʔ JJ) < Sem **ʔiʔaʔ-* < AA **ʔiʔaʔ-*. \diamond **a:** Mkk *ʔössé*, Mnd *šése*, **aʔ:** Gis *ʔateʔ*, Dizi *ʔus* // all < **ʔVs-*, not = **a:** Eg *ks* and the rel. forms (Copt, Tuar, Siwa, Izd, Hs, Dime) < AA **kas-*. \diamond **lw.:** Khmt *acən* // where from? *ḥaʕ* Appl Khm = **e:** Bil *naž* RBil (*nāš* Bnd LE), Aun *nac* (*ḥaʕ* Bl Ms after Hetzron) < **ḥaʕ-* (Khamir *ḥaʕ*) < **maʕ-* < **maʕ-*, Yaaku *močo* = **eʔ:** Dah *miččo* (< **mičč-*; hardly a lw. as in HRSC 386), Ong *miča* and likely = **i:** Mao *malʔé* (< **maʕč-*?); the latter hardly = **i:** Chara *mérta*.

11. 'breast' \diamond **b:** Akk *tulū* // *tulū* is rather 'nipple, teat' ('Brust(warze), mamma' AHW 1369); *irtu* is 'breast' ('chest, breast' AHW *i* 184; 'Brust' AHW 386) < **ʔir-t-* (Ugaritic *ʔrt*) = **r:** Mao *ʔaare*. \diamond **eʔ:** Arb *eḍu-ma-n* // *eḍum-an* = **eʔ:** Gwt *ʔaḍun-ko* (< **ʔadūm-ko*), Yaaku *éḍum-ín* (pl.), Chara *ḍama* and the rel. Omot terms (all < **ʔaḍum-* < **ʔaḍum-*), neither of which = **e:** Amh *ʔut* < **ʔub-* (Geʔez *ʔəb*, etc.), or **e:** Gis *ḍuwa* < **duHw-*, or **eʔ:** Dah *lōne* (form with a "click" < Sandawe EEN 48); Amh and Gis, to say nothing of Dah, are not rel. either. \diamond **lw.ʔ:** Bil *ʔəʔəb* // so Bnd LE (lw. < Eth); *ungū* RBil (*ʔəngwī* Bl Ms after Palmer) is the inherited term, same as **n:** Aun *aḡu*.

12. 'burn' (trans.) \diamond **a:** Eg *rkḥ* // *rkḥ* (and *rkḥ*) is 'light fire; burn down' (anyway, not = **aʔ:** Tum *ruž* < **ruž-*, **rud-* or **rug-*, but not < **ruk/k-*). \diamond **c:** Akk *karuru* // no *karuru* in CAD and AHW. \diamond **f:** Jib *šerof* // 'build a fire, put on fire' (JJ 254; 'anzünden' Bit 69), not sc.; *e-nḥé* is 'burn' (JJ 187; 'brennen' Bit 54). \diamond **e:** Amh *ndd* // *ndd* has nth. in com. w. **e:** Copt *mūh* (a slip?) < Eg *mʔḥ* (anyway intr. vb. in all Copt. dialects Vyc 131; not sc.). \diamond **i:** Tuar *āg* // Ahg *aḡu* (Ayr *aḡhu*) < **Haḡw*; not = **i:** Mkk *ʔogg* (< **HVgg-*, not < **HVḡk-*), Arb *ʔōg-aḍ*. \diamond **c:** Bil *harar* // rather a lw. < Sem **ḥrr*. \diamond **s:** Khmt *hau* // *ḥau-š* 'to warm up' ('riscaldare' [CR Khm 218]), not sc. and nth. in com. (a slip?) w. **s:** Or *gub-*. \diamond **x:** Ong *ḡow*, *ḡoyka* = **x:** Hamar *koo-ka* // *ḡoḡa* (Bnd Om 207), likely rel. to Maʿa *-ka* (HRSC 388; same as **i:** *aḥa* in Fl?) < **-ka* (v. HRSC 26).

13. 'claw' ◇ **e**: **Izd a-ḥbaš** // likely an Arabism; *iššer* and *i-sker* are the inherited terms for 'claw', same as **d**: **Tuar and Siwa** (<*i-skar). ◇ **g**: **Tum pulâl** // <*par/l-: Migama *pùrrùn*; Jegu *filló* = **i**: **Hs farčē** <*far-t-. ◇ **c?**: **Bil čiffer** // *čiffer*, a lw. < Eth.. ◇ **j**: **Gis dlelek** // *želek, ženek* <*šVl/nVḷ-, likely met. rel. to **l**: **Khmt ḥičela** (<*ḳičel-), **n**: **Or kēnsa**, **p**: **Had turaṅka** (<*ṭulu(n)k/k- = Sidama *čulunḳ-iččo*, with *č- <*š- by assim. with *-ḳ-; acc. to Sas Brj 183, <Ometo; however, the form with -l- is typical for the Cu, not Omot, variant of the present root), **r**: **Yaaku segil** (<*sVḳil, cf. Konso *šoloḳloḳ*; the latter hardly = **r**: **Dah coolo**, not <*coḳol- as *-ḳ > Dah *ḳ*, not 0), rel. to **t**: **Ong sonḳe** (*sonḳitte* Bla Ong), **Shin šungú-sa**, **Chara šugṅa**, **Male čungo**; all < AA*šunḳ-al-, with diverse assimilations, dissimilations and metatheses in different languages.

14. 'cloud' ◇ **c**: **Copt kloʔl-e** // continues Dem *ḳlʔl, ḳll* = **b**: **Eg ḳrī** (Pyr *ḳrr*, MK *ḳry*) <*ḳVIVl (Vyc 76). ◇ **lw.**: **Amh dāmmāna** // an inherited Semitic term (cf. Arab *damm, dimām-*, AramSyr *dām-ət-*), while **m**: **Khmt dimena**, **Or duúman-sa** and, likely, **Shin dáwna** (<*damn-) are rather lws. < Eth. ◇ **h**: **Tum ubây** // rather <*Hubay, hardly rel. to **h?**: **Beḳ bál**. ◇ **i**: **Kiir gāžimàre** // lw. <Hs *gažimare*. ◇ **n**: **Aun gunḳānni** // dissim. <*gungan-? (cf. *gun* 'fog') likely = **f**: **Tuar t-agnu-t** (Ahg *a-ḡanna*), **Izd i-s-ignu** <*ginaw-. ◇ **q**: **Dah mawiṅgu** // lw. <Swahili (EEN 37); *ṅúmine* is the inherited term in Dah rel. to Sidamo *goma* and Wolayta *guma*. ◇ **t**: **Ong pfolo** // *foolo* ST 117 = **t**: **Hamar polo**. The Ong form prob. a lw. < Hamar or Tsamai *poolo* [ST] and [SLLÉ]. ◇ **w**: **Male šāri** // = **r**: **Maṭa hlari** (*išare* HRSC 387) < Cu-Omot *čar- or *šar-.

15. 'cold' ◇ **b**: **Jib kezzem**, **c**: **qışem** // no *kezzem* either in JJ or Bit; *ḳešm* is 'cold' (n.) JJ 152, likely rel., with suffixed -m, to **b**: **Akk kašū** (*kašû* is the correct form) <*kašw/y-, and **c**: **Dizi keč-us** <*ḳVs-, but not = **b**: **Had ḳīd** <*ḳiž/ž-; the latter = Amh *ḳāzḳazza* (not in Fl) and **b**: **Dime ḳižin** and **Hamar ḳāži** <*kaž/zi. ◇ **?**: **Mkk** // *réélé* [JMkk 166], *màyé* 'cold (of wind)' CLR II 81. ◇ **g**: **Tum da** // *had* (CLR II 81) <*sad <*samd- = **i**: **Hs sañi** (*sányí* ibid.), likely <*saniri <*saniḳ- <*samiḳ- = **e**: **Tuar semmeḳ-en**, **Izd a-sammaḳ** and perhaps **o**: **Ong šanodi** (<*šamVd-, with *-m- > -n- assimilated to -d, <*šamVd-, with a shift of "emphatization"? The cognation based on this hypothetic reconstruction makes sense only if Fleming's record of -d- is correct; cf. *šantuni/cantoni/šanodi* [Fl Ong 44] and *can-* 'to be cold' [Sava 124]). ◇ **n**: **Dah wilišine** // <*lišin-, likely = **j**: **Beḳ Iṭa** (*láṭa* RBeḳ) <*laṭ-, **Gis leleṅ** <*lVṭlVn (Jegu *ṭólân*, met.) and, probably, **Mkk réélé** (not in Fl), dissim. <*lVṭlVṭ-, all

<*liʃ(-an)-. ◇ **f?**: **Maʔa saʔa** // <*caʔ- (Quadza *caʔu*); not = **f**: **Siwa šqi** (<*sVkVy) and Iraqw **çaqwa** (<*çaqʔw-, likely assimilated <*saqʔw-) as *-k not > Maʔa ʔ (HRSC 26).

16. 'come' ◇ **c**: **Akk kašādu** 'reach, arrive (moment of time), amount to, approach' (CAD *k* 271), not sc.; *alāk-* is the main term for 'come'. ◇ **g**: **Siwa us** and Ahg *as* (not in Fl where Tuar/Ahg imp. *éó* is quoted) = **k**: **Mnd so** (not <*zo), **Gis sawa**, not = **k**: **Hs zō** (not <*sō). ◇ **b**: **Mkk b** // ʔòb́i with a different meaning JMkk (not sc.); for 'come' CLR II gives ʔidó = **h**: **Izd addu-d** <*Hadw = **s**: **Chara wod** = **l?**: **Dime ād**, all <AA *Hi/adw- ~ *(HV-)wad-. ◇ **j**: **Kiir wade** <*wat- <*Hwat- (cf. Tule *wutà*, Tangale *watu*, Karekare *eti*, Sokoro *ítí*), not = **j?**: **Had wār**. ◇ **s**: **Shin w-** // wà LambSh, not = **s**: **Chara wod**; rather = **a**: **Eg íy, íw**, **Copt ʔi**, **Tuar éo**, **Beḏ ʔi**, **Ong ʔē**, **Dizi y-** = **i?**: **Tum ò** <*ʔaw-, etc. (all <AA *ʔayaw-, cf. Janjero *iyāwa* id.), but not = **i**: **Mkk ʔā?** ('aller à la maison, chez soi, etc.' JMkk 55; not sc.). ◇ **p**: **Maʔa lita** // <*liʔ-t-? Likely = **m**: **Yaaku lēʔe** (rel. in HRSC 389).

17 'die' ◇ **b**: **Beḏ ya** // yāʔi, nth. in com. w. **b**: **Jib hárɔg** (a slip?). ◇ **h**: **Yaaku kēhē** // rather <*gVh- = **i**: **Maʔa ga**, **Iraqw gw?** (*gwā?*- MQK 42); note, however, that Yaaku -h vs. IRQ -ʔ is irregular.

18. 'dog' ◇ **f**: **Mkk gédè** // <*gid- (cf. Mofu-Gudur *gədəy* id.), not = **f**: **Tum ga**, pl. **garak** (<*gar-: Lele *girà*, Kabalay *gàra*). ◇ **i**: **Bil gidin**, **Khmt gəzəŋ**, **Aun gəsəŋ** // <*giʒ/ʒin- = **e**: **Siwa agurzəni** <*gu(r)ʒ/ʒin-, with -r- inserted; hardly rel. to **i?**: **Hamar aksi** (acc. to Bnd Ar 148, Hamar *qaski*, Ari *áksi*; rel. to Brb: Ahg *aysi* 'loup' F 1529, Ayr *ta-γəs-t*, E Wlm *ši-γəss* 'chien-loup' Aloj 73 < AA *kasy-); neither Agaw nor Hamar = **i**: **Yaaku kwehm** (*kohen*, pl. *kwehman* Hei Ya) <*kʷahn-; the latter very likely = **l**: **Mao kânê** and the rel. Omot terms. ◇ **k**: **Iraqw seʔay** // met. <AA *ʔays- = **h**: **Beḏ yās**, **Had wušša** (*waši-ččo*, pl. *wušša*).

19. 'drink' ◇ **a**: **Eg zwr** // = **a**: **Copt sō/sū** <*zwr, but not = **a**: **Tuar əsu**, **Siwa** and **Izd su**, **Tum hē**, **Kiir se**, **Hs šá**, **Mnd še** (*šá*, *šúšé*), **Gis še** (and *sí*), which = **n**: **Mao iš**, **Shin uš**, **Chara uš**, **Male úške** (*úš-ke*), all < AA *suy- ~ *wis-. ◇ **a**: **Eg bʃbʃ** (noun) // vb. (must be sc. differently from **a**: **Eg zwr**); very likely rel. to **p**: **Dizi bē-** (*bē*, *bay*). ◇ **h**: **Arb ʔig-e** // not = **h**: **Or ɖug**, but = **i**: **Had ag** and **j**: **Gwt ukk**, all <*ʃVg(g)-; likely met. rel. to **g**: **Beḏ gw?** (*gū?* RBeḏ) <*guʃ-. ◇ **i**: **Yaaku eḡ** // -eq- Hei Ya (-q <*k), not = **i**: **Had ag**.

20. 'dry' ◇ **a:** Eg *šw*, Copt *šowe* // < AA **čVw-* (> Kafa *šu?ō* id.), likely met. rel. to **v:** Dime *wučum*, Hamar *wáčči* <**wač-*; the Eg and Copt forms have nth. in com. w. **a?:** Akk *šābul-um* (*šābul-*, *š-*stem <**ʔbl*); the latter = **k:** Beḏ *balama* (*bāl-ama* RBeḏ). ◇ **b:** Jib *gušun*, **c:** *qisaf* // no *gušun* either in JJ or Bit; *ḳéšaḥ* is 'dry'. ◇ **?:** Mkk // *méedí* JMkk 138. ◇ **i:** Hs *busaššē* // < *buše* (vb.), very likely = **e:** ArabSyr *yabis*.

21. 'ear' ◇ **a:** Eg **itn* // if this unusually looking form is a reconstructed proto-form for *idn*, it is not the case, as *idn* is rel. to Sem **ʔudn-* <AA **ʔu/iš-n-*; besides, *idn* is a graphic sign depicting ear and as such can hardly be sc. ◇ **c:** Copt *mačʒ* // (Bohairic *mašže*), continues Eg *m-sdr* (the main Eg Pyr term for 'ear', not in Fl), likely <**m-s-gVl-*, cf. Med *gry-t* and *gny-t* 'part of ear', which, if rel., point to **gly*; anyway, nth. in com. w. either **c?:** Tuar *t-amzuk* and the rel. Brb terms (<**ta-mV-zug-* < AA **čug-*, cf. E. Cu **de/og-* 'hear') or **c?:** Had *mačča* (the Brb and Had terms are neither rel. to each other). ◇ **d:** Amh *žoro* // lw. (not sc.) < **d?:** Or *gurra*. ◇ **h:** Hs *kunne* // <**ḳum-n-* = **g:** Kiir *kâm* <**ḳam-*, **g?:** Dime Hamar *ḳam* and Gwt *qaanté* (so Black 295 and AMS; Fl quotes **k:** Gwt *hahhaw*) <**ḳam-t-*. ◇ **q:** Mao *waale* // probably = **q:** Shin *wááza*, Male *woyzi* (cf. Mao *mele* 'liver' vs. Male *mayzi*, Chara *mayya* <**mayš/ž-*), but may alternatively = **n:** Maʔa *ilama* (<**ʔila-ma?*); the Shin and Male forms <**waš-* are anyway rel. to **a:** Akk *uznu* and the rel. Sem terms <**ʔu/iḏn-* <AA **ʔu/iš-n-*). ◇ **p:** Ong *ʔoowa* // rather = **q:** Chara *woya* (hardly <**waz-*: **-z* is not expected to yield Chara *-y* or *0*), **o:** Dizi *ʔáái* and **o:** Iraqw *eʔa*.

22. 'earth' ◇ **e:** Amh *afār* // 'ashes, soil', not 'earth' (not sc.; *mare-t* and *mədər* correspond to 'earth' in Amh). ◇ **f:** ArabSyr *trab* // 'soil', not sc. ◇ **m:** Bil *bira* // < **bir-*, not = either **m:** Aun *bəti* < Agaw **bə-t-* (> Bil Khamir *bəta*, cf. Appl IC 38) or **o:** Or *bīyye?* (< Cu **biy-t-*, cf. PEC 45); rather not = **m:** Beḏ *būt*, accus. < *būr-t* (RBeḏ 50) < Cu **bi/ur-* (**biy-t-* and **bi/ur-* are two different roots, cf. Arb *biyy* 'land, earth, field' and *bóore* 'earth', not in Fl). ◇ **t:** Dah *gudde* // <**gud-* (HRSC 239) = **h:** Siwa *i-ždi* <**gidy* 'sand' (cf. Ntifa *i-gidi* id., etc.). ◇ **x:** Mao *ḳéšé* // <**ḳas/š-* (=Kafa *ḳačīnō*, Bil *ḳúšā* 'sand') = **k:** Hs *ḳaasa*.

23. 'eat' ◇ **e:** Kiir *ši* // 'eat soft things' <**či* (cf. Diri, Zaar, Wang *či*) = **c:** Siwa *əč*, Izd *ččat* (*t-š*), Dime *əts*, Hamar *its* (*is* Bnd Ar) <**ʔič-*, not = either **e:** Tuar *əks* <**kVs*) or **c:** Jib *té*, Hs *či* ('eat soft things' <**ti*), Had *it* (met.). ◇ **a:** Tum *wâm* // *əm* ('eat hard things'), not = **a:** Copt *wōm* continuing Eg *wnm* (caus. *s-nm*) <AA (*w*)*lm* (Sem: Akk *lamāmu* 'chew', Arab *wlm* IV 'regale',

Mehri *awōlem* 'prepare food'), but = **j**: Mkk *ʔōmi* 'eat hard things' < **ʔaym-* (cf. Migama *ʔáymó*, Sokoro *áymè* id.), Beḍ *ʔām* (not in Fl where **g**: Beḍ *tam*, rather an Arabism, is quoted), Arb *ʔōhōm* (*ʔōhōm*, with an inserted *-h-*), all < AA **ʔaym-*, likely met. rel. to **o**: Mao *mii*, Shin *m* (*ma-*), Chara *ma*, Male *muʔ* < AA **mayʔ-*. ◊ **g**: Bil *ʔam* // 'to taste' < Arab *ʔm* id., not sc.; *qwi* is 'eat' (RBil) = **h**: Khmt *ḥu*, Aun *yu-ŋ* and Maʔa *kuʔ* (all < Cu **kwʔ-*).

24. 'egg' ◊ **lw.**: Amh *ēṅkʷalal* // *ənkwəlal* (not a lw.) < **ʔVn-kʷalalih-* (SED 153-4), met. rel. to **b**: Jib *kōhl-ât* (*keḥzîn* JJ = Mehri *káwḥəl*, Soqotri *kḥol-hin*) < **ka(w)h̄il-* (less likely = **b**: Mao *kyale*, as **k-* normally yields Mao *k-*); further rel. to **l**: Bil *kagaluna* (*kaḡalúnā* RBil) < **kakal-* < **kaḡal-*, Khmt *qululūna* < **qulul-* < **kuḡul-*, all < AA **(ʔan-)kʷah̄il-* ~ **(ʔan-)kʷalih-* (met.), probably eventually rel., with *-l* suffixed, to Cu **kʷa(n)h̄-* (v. below) ~ Sem. **(ʔan-)kʷah̄-*. ◊ **d**: Tuar *t-ekaki-t* // not sc. as not used in Ahg (Ayr *te-kaki-t* 'egg'); *ta-s-ədal-t* is 'egg' in Ahg. ◊ **l**: Aun *āṅkʷalaluwa* // *ənkwəl* (Hetz), not sc. as it is rather a lw. < Amh *ənkwəlal* (as well as Bil *ənkwəlaleḥ* RBil and Khmt *enqulālīḥ* CR Khm, lws. synonymous to the inherited forms quoted above). ◊ **i**: Mnd *šey* // *šéya*, *šaʒa* CLR II 123 = **j**: Gis *teĉ* < *t-Vĉ-* (Muktele *ĉâĉâi*) < **šay-*, likely with a secondary lateralization < Ch **sayH-* ~ (met.) **Hays-* (Goemai *haas*, Fyer *hyés*, Tsagu *sóhoyi*, Jimbin *áshú*, Zime-Dari *shae*, Birgit *úsiyà*) = **a**: Eg *swḥ-t*, Copt *sōwh-i* (all < AA **saw/yh-*). ◊ **k**: Ong *fugaḥe* // also *ʔukahεε-da* SLLE 6; hardly rel. to **k**: Gwt *ukāḥe*, but can be a lw. < Tsamai *ʔugaʔati* id. (SLLE 6), *ukahay-te* (Bl Lists); cf., however, Ong *ŷ-* vs. Tsamai *ʔ-*, and the striking affinity of the Ong form with = **m**: Dah *ʔogooe* (*ʔógohi* Tos Dah 137). ◊ **k**: Maʔa *ḥoḥoha* // and *ikokoha* < **kVḥkVh-* (cf. HRSC 26), not = **k**: Gwt *ukāḥe* (< **ʔukah-*), Ong *fugaḥe* (v. above), but = **o**: Had *kunḡa*, Iraqw *qānh̄i* < Cu **ku/a(n)h̄-* or **kʷa(n)h̄-*.

25. 'eye' ◊ **d**: Mkk *ʔer-(sá)*, Kiir *yir*, Gis *re* (and *hiri*) < **Hu/ir-* not = **d**: Tuar *t-ēd-t* (Ahg *t-iṭ*), Siwa *t-ətt*, Izd *t-iṭ* (< **t-Hiḍ-t*), Hs *ʔidò*, Mnd *iĉe* (< **ʔid-*, cf. Jimbin *ʔida*, Migama *ʔidè*, etc.) < Brb-Ch **ʔid/t-*. ◊ **d**: Tum *tùwá* // *tùúr* (CLR II) may be either < **tu-Hur-* (sc. with Mkk, Kiir and Gis), or < **tu-Hud-* (sc. with Hs and Mnd).

26. 'fat' ◊ **b**: Eg *mrḥ-t* // 'oil', not sc. (< *wrḥ* 'to oil' EG II 111); nth. in com. w. either **b**: Hs *may* (*mài* 'oil, fat, grease' Abr Hs 638), likely < **ma(H)r-* (cf. Sura *ṇmùúr*, Bata *māré*, Bachama *mare* CLR 132-3; cf. also Stolb 82), **b**: Ong *mōra* < AA **mar-* (unless a lw. < Tsamai or Or; cf. Tsamai *mooru*, Arbore *moora* SLLE 6; cf. also Aun *mori*, not in Fl, Or *moora*; Akk *marû* id., Ugaritic

mru, Hebrew *mārī?* 'fat cattle'; Male *mōresi* Bla Omot < **mor-as-*), or **b**: **Mao málé**, **Male māli** (in Bla Omot No. 26.5. reasonably comp. to CCh: Kilba *mal*, Margi *maél*, etc.) < AA **mal-*; **mar-* and **mal-* are better to be treated as two different roots. ◇ **c**: **Akk šummun-um** // 'to oil'; *šamnu* is 'oil, fat' < AA **saman-* = **c**: **ArabSyr saman**, not = **c?**: **Jib śabh** (*śabhún* JJ) 'fat' = Amh *sāb* (the inherited term for 'fat', not in Fl., where **Amh lw. čoma** is quoted) < **śabh-* (Gefez *śabəh*) < AA **cabh-*. ◇ **a?**: **Tuar udi** // 'oil', not sc. (anyway, not = **a**: **Eg ɪd**, as Eg *d* does not correspond to Brb *d*); *t-ādən-t* is 'fat' in Ahg < **-dVh^wVn-* = **e**: **ArabSyr dihn** = Khmt *didn-o* (not in Fl where **p**: **Khmt widlim** is quoted, which is an adj., not sc.). ◇ **s**: **Gwt kōpi** // < **gōb-* (Tsamai *gōb-i*), hardly = **s**: **Diz kobab** (**g-* > Dizi *g*, not *k*). ◇ **n**: **Dah ʔahli** (in Fleming's notation) // *ʔaši* < AA **ʔaš-* (Qwadza *ašito*), not = **n**: **Yaaku ləhen**, **Beđ lā?** (< **lah-*? Note, however, that Yaaku *-h* vs. Beđ *-?* is irregular).

27. 'feather' ◇ **e**: **Jib fəfir** // only in Bit 27 ('hasty person' in JJ 60; 'feather' in Harsusi); even if real, rel. to e: *Tuar a-fraw*, but not to **e**: **Khmt fālfālā**. ◇ **c**: **Amh lab** // more likely a lw. < Omot *lababa* than an inherited Sem root (cf. LGur 373).

28. 'fire' ◇ **t**: **Akk iš-um** (*išātu* is the correct form) // = **b**: **Amh îsat** (*as-at-*) < **ʔiš-at-* < AA **ʔis-*, not = **b**: **Jib śōt** < **šiwat-* (Soqotri *šiyat* id., Arab *šiwāt-* 'flame') < AA **šiwat-*. ◇ **a**: **Tuar a-ku** // 'be lit', not sc.; anyway, not rel. either to **a**: **Eg ht** (*h-t*) or to **a**: **Izd a-fa**, **a?**: **Gis ʔavo** (< **ʔafaw-*, cf. Gider *afá*, Kotoko *fo*); the latter two forms = Ahg *efew* 'fire' (not in Fl), but they have nth. in com. w. **a**: **Eg ht**, *tə-mse* is the other Ahg term for 'fire' = **f**: **Siwa t-imsi**. ◇ **a**: **Mkk ʔūwwó** // likely < **HVww-* (cf. Mofu *áwðw*, etc.), probably = Tigriñña *haww-i* id., but not = either **a**: **Eg ht** or **a**: **Izd a-fa**, **a?**: **Gis ʔavo**. ◇ **a?**: **Arb ʔéeg**, **a**: **Yaaku iku**, **Dah ʔēga** // all < **ʔig-*, not rel. either to any of the above discussed forms sc. "a", or to **a**: **Gwt hatte** < **kat-* (Tsamai *kátte*), likely < **kaʔ-t-*; the latter form is neither rel. to any of the above discussed forms sc. "a". ◇ **o**: **Ong ʔohona** // very likely < **ʔoh-on-* = **a**: **Eg ht** (*h-t* Pyr, *ʔh-t* BD-Gr) < **Vh-t* (also = Qwadza *haʔo* id., met.).

29. 'fish' ◇ **d**: **Jib hut** // lw. < Arab, not sc. ◇ **g**: **Tuar emen** // not used in Ahg (see Fouc 1207); *a-sulm-əy* is 'fish' in Ahg = **h**: **Izd a-slem**. ◇ **o**: **Gwt haare** // < Dull **kar-* (v. Bla Ong), hardly = **o**: **Ong kaare**, **Ham kaara**; rather a lw., as the distribution of languages (also Dasenech *kára*) points to an areal term likely of SOMot origin (cf. also Banna *kaara* id. Bla Ong after Fleming). ◇ **q**: **Iraqw siyyo** // *siyomō*, *sīyó*; if, acc. to MQK, < Bantu, not sc.

30. 'fly' ◇ **c**: Akk *šaʔu* // 'fly about, flutter', not sc.; *na-pruš-* is the main term for 'to fly'. ◇ **t**: Amh *-brer* // *bärrärä*, a debatable case: rather <Cu than an inherited term (cf. SED I 4), in which case not = **t**: Had *barar-* and the rel. forms <**brer*; the latter hardly = **t**: Shin *bíd* as Shin *-d* <**-r* needs proof (cf. LambSh 281). ◇ **f**: Tuar *illai* // Ahg *elli*, Ayr *allay*, etc. 'soar', not sc. ◇ **g**: Tuar *iggad* // Ahg *iggad* (not *iggaḍ*) 'fly' <**-wwad*. ◇ **u**: Siwa *âmfâr* // *am-fâr* = **a**: Eg *pʔ y/pʔ w*, Jib *ferr*, Bil *fir*, Maʔa *puru*, Dime *far*, as for **a**: Yaaku *pêri*, it can be either <**pír-* or <**bir-* (= **t**: Had *barar-* and the rel. forms). ◇ **l**: Ong *ʔahay* // does not mean 'to fly', but 'to rise, stand up' (Sava 112, Fl Ong 47; 'to fly' is conveyed by the compound *ʔahāibəkurru* SLE 6); cannot be rel. to **l**: Arb *hate*, Gwt *heʔ-id*.

31. 'foot' ◇ **i**: Kiir *wasâm* // <**ʔasam-* (Jimi *assam*, Miya *ʔsúamá*, etc.), very likely met. rel. to **q**: Maʔa *saʔamu*. ◇ **l**: Bil *zaguana* // *zaḡʔanā* 'heel, hoof, foot'; *luk* is 'foot, leg' = **m**: Khmt *lúkw* and the rel. terms. ◇ **aʔ**: Dime *dooto* // not = **a**: Hamar *rro*; neither one = **a**: Eg *rd* (Eg *r* <**r* or **l*, *d* <**d* or **t*).

32. 'full' ◇ **c**: Tuar *itkar* // Ahg *ətkar* = **d**: Siwa *čūr* <**tšur* <**tkur* <**tkur* and, probably, **h**: Hs *čikakkē* (<**tikkar-* <**tkkar-*?); nth. in com. w. **cʔ**: Bil *intay-aux* (*intāḡ* 'be full' < *insaḡ* 'fill' RBil 40 <**ʔinč/çaḡ-*) which = **k**: Khmr *yečaq* (<**yičaq-*). ◇ **bʔ**: Izd *a-mmer* // *ʔammer* < Arab (anyway nth. in com. w. **b**: Akk *malāʔ-um* and the rel. Sem forms <**mlʔ*; a slip?). ◇ **f**: Tum *an* // = **i**: Mnd *ánáha*, Gis *nah* (<**ʔa-nahw-*, cf. Bade *nuhwi*, Migama *ʔúnáw*, Ndam *ʔóná* 'fill', etc.). ◇ **o**: Had *woʔma* // acc. to Sas Brj 101, = Burji *hūm-áa* (adj.), *huʔ-* (vb.), both <**huʔ-m-*; = **s**: Maʔa *hu* <**huʔ-* or **ḡuʔ-*. ◇ **r**: Dah /ook // a conspicuous lw. with a "click" (v. HRSC 388; acc. to Bla-Tos, < Sandawe).

33. 'give' ◇ **d**: Copt *tī* // <**dy-* (considered an irregular formation from **b**: Eg *rdy* Vyc 209); neither = **dʔ**: Tum *tāḡ* <**tak-* (Boghom *tak/γ*), nor = **d**: Gwt *teḡ* <**dah-* (Tsamai *dah-*), nor = **d**: Mao *ta*; the Tum, Gwt and Mao forms are, in their turn, unrel. to each other. ◇ **h**: Tuar *əkf* <**əfk* // Ahg *əkf* <**Hakf-* (Ghadames *ekf*, Adghaq *akfa*, Baamrani *əkf*, etc.) and *əfk* <**Hafk-* (Semlal, Nefusa, Qabyle *əfk*) are two different roots at least on the Proto-Berber level. ◇ **i**: Mnd *so* // <**cay* (Musgum *sa*, Mburku *cey-*, Miya *cá*) not = **i**: Siwa *ūš*, Izd *š* <**Huk*, but very likely = **n**: Arb *sihis* (Hay Arb; *siy* Black), Yaaku *iseʔe* (and Somali *sīy-*) < ECu **siyʔ-* < AA **cayʔ-*. ◇ **m**: Beḍ *nun* // (*inīyu* Bl Ms after Thelwall) likely = **p**: Ong *naʔa*, but not = **m**: Or *kên* (a slip?). ◇ **q**: Shin Chara Hamar *im*, Dime *īim*, Male *īng* // all <**ʔim-* (Male <**ʔing-* <**ʔim-*?) = **a**: Eg *imi* (the common notation is *imy*; imp.).

34. 'good' ◇ **d**: Jib *ħar*, **e**: *ērħim* // *ħar* is a noun 'well-being, good' (JJ 311; not in Bit), *ērħim* is 'beautiful' (JJ 210; 'schön' in Bit 57), both not sc.; *fəḵšun* 'good, helpful, prosperous, (tree) flourishing' (JJ 56, not in Bit) fits better. ◇ **g**: Tuar *ifrar* // vb. = **a**: Eg *nfr* (vb.) <*nV-fVr. ◇ **h**: Siwa *a-zařim* // <Arab. ◇ **i**: Izd *rwu* // vb. < Arab *rwy* 'live well', *rawiyy-* 'abundant' < 'well-watered'. ◇ **m**: Hs *kirkii* // 'excellence' (Abr Hs 525), 'uprightness' (Barg 611), not sc.; (*dà*) *kyâu* (Abr Hs 602) fits better. ◇ **t**: Or *dánsa* // <*dan-t- = **u**: Had *deenamo* <*dan-amo. ◇ **x**: Dah *wine* // = Ong *wanna* 'good (for self)' (Fl Ong 48). ◇ **š**: Shin *šēnga* // perhaps = **o**: Gis *medlej* (= *mežen*) <*mV-šVng-.

35. 'green' ◇ **j**: Hs *šūđi* // 'blue', not sc. with **j?**: Bed *sota* (*sôt/day* RBed); *kōrè* is 'green' in Hs (Abr Hs 538; not in Fl) = **y**: Male *karci* <*kar-t- (cf. *karc*, Chara *karta* 'black'). ◇ **m**: Bil *ħutan* // *qūt-ān* RBil, probably = **u**: Iraqw *qansar* (*qancar* MQK 84 < Cu *ka(n)t-ar-, cf. Burunge *qančeri* 'green', *qanča* 'unripe, raw', Dah *kátte* id. HRSC 250). ◇ **n**: Khmt *limlim* // a lw. <Eth (< Sem: Arab *lmm* 'av. les dattes presque mûres' BK 2 1022, Akk. *lammu* 'almond tree; sapling' CAD L 68; comp. by L.Kogan). ◇ **r**: Gwt *illaħa* // hardly unrel. to **p**: Arb *řiliri* (<E. Cu *řilah-), though *ħ is expected to yield Arb *h*, not *ř*. ◇ **?**: Mařa // (no term in Fl) -*hako* HRSC 388, likely = **?**: Hamar (no term in Fl) *řek* (Bnd Ar). ◇ **?**: Ong // *carkamuni*, *čarķa-muni* (in Bla Ong 'green, wet' comp., on the one hand, to Ong *čarki* 'dew', Tsamai *čarke* id., and, on the other, to Aun *carki* 'black', which looks preferable) <*carķ- or *čark-?

36. 'hair' ◇ **b**: Akk *peertu/šaartu* // two different roots: *pēr-t-* <*pařr- <*parř- = **c**: Copt *fōe* continuing Dem *fřy*, OEg *fřř* <*fVrř (EDE II 564); and *šār-tu* = **b**: ArabSyr *šafra* (<Sem *šařr-) and **g**: Izd *a-zzar* <*zHar, all <AA *čařr-. ◇ **e**: Amh *šāgur* // *řāgur* <Cu (cf. Bil *šuğřr* R Bil, Afar *dāgor* P-H id.), not sc. with **e?**: Shin *širaa*. ◇ **o**: Aun *cicifi* // *cicifi* Appl VS, *řiřifř* CR Aw < AA *čifčif-, cf. Arab *dřdf* 'plait (hair)' and Hs *čēfē* 'comb (the beard)'; not = **o**: Bil *řibka*, Khmt *řivķa* <*čibk-. ◇ **p**: Or *řifeensa* // since Or *f* continues both *f/p and *s (< AA *č), can either = **p**: Arb *ruufan* (-f- <*p/f only), or, less likely, = **p**: Yaaku *řisin* (if <*řis- <*řič-); the latter term, however, is rather <*řiz-in- <*řiz/ř- (obviously not = Arb *ruufan*; cf. also Dah *řádà-ne* 'feather') = **q**: Had *odda* <*řord- <Cu *řV-rVř/ř- (cf. Kambatta *orza-t*, Burji *orda* id.). ◇ **k**: Gwt *kaaso* // <*gaz- (Tsamai *gaz-o*), not = **k**: Hs *gāři* (*gāři*) <*gáč-; the latter = **l**: Mnd *ugř* (*ugře*, *úkře*) <*g^wVč- (otherwise <*g^wař- = Hs *gìřō* 'k. of hair' = Gwt *kaaso* <*gaz-), Gis *řwič* (= Mofu *āngwèč* <*řan-gwVč-).

37. 'hand' ◊ **a**: **Eg d** // a sign depicting hand, not sc. ◊ **d**: **Copt tor** // continues **b**: **Eg d̥t** (*d̥-t*, *dry-t* <*gVry?). ◊ **g**: **Tum gen** // *gēŋ* <*gVnH-, very likely = **o**: **Yaaku kiŋine** <*gi?n-, met. <*gVnŋ- (Bayso *gene*, Burji *gan-áa*, cf. PEC 17), which may further met. rel. to **m**: **Had anga**; the latter, anyway, not = **m**: **Or harka**, **Gwt harkó** (a slip?). ◊ **l**: **Aun taf** // <*taf (Damot *täf*), not = **l**: **Dah daba** <*dab-.

38. 'head' ◊ **a**: **Copt žo** // continues not **a**: **Eg tp**, but **s**: **d̥d̥** (a slip?). ◊ **c**: **Tuar a-gayu** // not sc. as not found in the available sources (*a-gayu* is 'head' in Shilh); *eγaf* is the main Ahg (and other Tuar) term for 'head' = **d**: **Siwa a-ħfi**, **Izd iyf** (<*kaŋy). ◊ **c**: **Hs kay** // cannot be sc. with **c**: **Tuar a-gayu** (see above; anyway, Hs *k*- does not correspond to Brb *g-), very likely = **Kiir g**: **kām** <*ka-m (also = Bolewa *kɔi,kòyí*, Migama *kàya*, etc.). ◊ **j**: **Beḍ girma** // <*gir-m-, nth. in com. w. **j**: **Gwt pukkaŋ-ate** (a slip?), but likely = **l**: **Aun ŋari** (Hetz), *ngári* (Bla Ms after Beke) <*an-gar-? The latter, anyway, has nth. in com. w. **l**: **Or mata?** and the rel. Cu and Omot terms (a slip?) <*math- (PEC), which, in their turn, hardly = **l?**: **Maʔa -muʔa** (acc. to HRSC 387, = Dah *ʔani*, which is doubtful) which has parallels with no -t-: Afar *amó*, *amú*, Sidamo *umo* (besides, *-t- > Maʔa 0 would be difficult to prove).

39. 'hear' ◊ **c**: **Izd sfeld** // *s-fəld* (caus. s-stem), nth. in com. w. **c**: **Tuar sel** (*əsəl*) and **Siwa sel** <Brb *islaw. ◊ **i**: **Beḍ masu** // probably = **i**: **Bil was**, **Khmt waš** (unless <*waš-, cf. Khamir *waz/š*), which are likely rel. to **o**: **Ong ʔāš** and met. rel. to **q**: **Shin šiša**, *ši* (<*si?-/siʔsa?; rel. to Ong in Bla Ong), but either one has nth. in com. w. **i**: **Had mačč-əs**. ◊ **p**: **Mao kewe** // <*keb- (cf. Moča *käbbi*, etc.) = **l**: **Gwt kapaḡ** <*ka(b)kab- (cf. Tsamai *q'abay-s*).

40. 'heart' ◊ **a**: **Tuar ul/ulaw-en**, **Siwa uli**, **Izd ul** // <*wVli(m)- (cf. Kel-Ui *uləm*), not = **a**: **Eg ib**, **Akk libbu** and the rel. forms <*lib- (both have nth. in com. w. **a**: **Tum tuwar**), but = **?**: **Hamar weylém** and, more hypothetically, **s**: **Ong læta**. ◊ **k**: **Or onne?** // <*wadn- <*wazn- (PEC 20) = **m**: **Had wodáno** = **i**: **Khmt iŋzên** (*əzân* in Appl Khm; however, glossed as 'fegato' in CR Khm 208 while *gizú* is given for 'heart'), **Bil wadän**, pl. *wazan* (RBil; not in Fl); all <AA *wažin/m- (Sem: Arab *wadām*- 'belly with intestines'). ◊ **l**: **Arb zazzá**, **Male saaza** // <*zaŋzaŋ- = **n**: **Gwt safa-ko** <*zaŋ- (= Tsamai *záŋ-kó*). ◊ **r**: **Maʔa šawaho** // acc. to HRSC 387, *swaho*; <*šawah-, likely = **j**: **Aun šəw** <*šVw- or *sVw-.

41. 'horn' \diamond **a:** Mkk *ʔopi-só* // hardly = **a:** Eg *ʔb* (*-b is expected to yield Mkk *b*, not *p*). \diamond **i?:** Aun *ʒénʒ* // < *ʒ/ʒanʒ/ʒ-? Hardly = **i:** Bil *gih* (pl. *gīkik*), Khmt *ʒi* (pl. *ʒik*) < *gih- (Appl VS); the latter probably = **j?:** Arb *gah-mo*, pl. *gáh* (perhaps < *gah-); the latter is hardly rel. to **j:** Or *gaáfa*, Gwt *kaas-ko*, Ong *gattakko* < *gač-? (I suppose *-č- because of Or -f- vs. -s- in other E. Cu and a very tentative assumption that if the Ong example is rel. and not borrowed < Dullay, it is *č more than any other sibilant expected to yield -t(t)- in Ong). \diamond **b?:** Maʔa *haʔemu*, Iraqw *harmo* // < *haad- (acc. to HRSC 256 quoting Maʔa *lu-haremú*, *lu-haremú*; for S. Cu *-d see ibid. 22) or *har-; anyway, not < *kar- (for S. Cu *h and *k see HRSC 26-7), not = **b:** Akk *karn-* (a mistake for *kar-n-*) and the rel. forms < *kar-n-.

42. 'I' \diamond **b:** Kiir *am* // nth. in com. w. **b:** Jib *hai* (*he, he?* JJ). \diamond **f:** Shin *ta/taani*, Chara *ta/taani*, Male *tani* // < *ta-ʔa-ni; these composed forms by second and third or only third of their components are met. rel. to **a:** Dizi *inu*, Dime *aat-o/e* (*ʔatə* Bla Om), Hamar *inta*, Beɓ *ane*, Bil *an*, Khmt *ān*, Aun *an*, Or *ani*, Had *ani*, Gwt *ano*, Dah *ana/añi*, Maʔa *ani*, Iraqw *an/ani*, Eg. *in-k*, Copt *anok*, Akk *anā-ku*, Amh *ani*, ArabSyr *ana*, Tuar *nek*, Siwa *niš* (< *ni-k), Izd *nekk*, Mkk *nu-η/nūno*, Tumak *nā*, Hs *nī/nā*. \diamond **a:** Eg. *in-k*, Copt *anok*, Akk *anā-ku*, Tuar *nek*, Siwa *niš*, Izd *nekk* // are rel. by their -k component to **e:** Ong *ka/kāta*.

43. 'kill' \diamond Akk **b:** *mqt*, **c:** *dāku*, *nēru* // three, not two, different roots, of which *diāku* is the main term for 'kill', *nēru* 'kill, slay' fits less, while *maḳātu* is 'fall down, collapse; attack' (*šu-mḳutu* 'strike, kill in a hunt'), not sc. \diamond **f:** Amh *g-d-1* // *gāddālā* < *gdl (Eth and Arab 'to fight'), not = **f:** ArabSyr *qatal* < *ktl (cf. Arab *gdl* 'to fight'; cf. two different roots, *gdl and *ktl, in Gurage LGur 262, 508). \diamond Mkk **h:** *t-*, **k:** *īd* // no *t-* in JMkk and CLR II (probably *t-idè* CLR II 213 is erroneously separated into two different roots); may rel. to **k:** Tum *až* (if the latter is < *ʔad-), but not **k:** Mnd *žā* (< *ʒ/ʒa, not *da), which, in its turn, may = **k:** Tum *až* (if < *ʔaʒ/ʒ-) and very likely = **t:** Dah *ʒeʔeɓ* < ʒeʔ-eɓ (caus. of ʒāʔ- 'die') and Ong *ʒiʔ* (Fl Ong 50), all < AA *ʒaʔ- or *ʒaʔ-. \diamond **z:** Dime *dēs*, Hamar *dees* < *de-es (caus. of *di- or *day-'die'); if *d-* reflects AA *d-, may rel. to **k:** Mkk *īd*, if *d-* reflects AA *ʒ- or *ž-, may rel. to **t:** Dah *ʒeʔeɓ*, Ong *ʒiʔ*. \diamond **p:** Arb *ʔēḳēs*, *igis* // if *ʔēḳēs* is correct, must be two different roots: *ʔeḳes-* < *ʔVḳVs-, either = **l:** Hs *kašē* (< *kas-) or, if < *ʔeḳ-es (caus.), = **s:** Yaaku *gai* (-q'ai- Hei Ya) < *ḳay- and **o:** Khmt *ḳūw* and the rel. Agaw terms < *ḳuw- (very likely rel. to Yaaku); *igis* Hay Arb 340

<?*igi-s- = p: Or *ažēs* <?*agi-s- (caus. of 'die') = u: Maʔa *gaʔa* (met.; cf. *ga* 'die') and Iraqw *gās* (caus. of *gwāʔ-* 'die'), all <?*agi/g^(w)aʔ-s.

44. 'knee' ◊ a: Eg *mʔ s.t, pʔ d* // two different roots: *mʔs.t* (Med) <?*mVIVs- rather than *mVrVs-, very likely = g: **Gis *miluwes***; *pʔd* (Dem) = c: **Copt *pat***, **Tuar *a-fud*** and the rel. terms. ◊ b: **Akk *birku***, **Jib *berk***, **ArabSyri *rikbi*** // *birk- and *ribk- are perhaps to be treated as two different roots at least on the Sem level (cf. *bārikat-* and *rukbat-* id. in Arab, etc.: see SED Nos. 39 and 232). ◊ d: **Mkk *ziibe*** // not <?*gib-, neither = d: **Tum *gub*** (<?*gup-, cf. Migama *gìppi*, Jegu *gifo*), nor = d: **Hs *gwiyya*** (pl., *gwí-wà* sing.); the Tum and Hs terms are not rel. either. ◊ i: **Arb *kilik*** // <?*kilk(il)-, likely = p: **Dizi *kola***, but as *g- does not yield Arb *k-* and *-b does not yield Arb *o*, the Arb form neither = i: **Or *žilba***, **Had *gurubbo*** (<?*gulubb-, cf. Sidamo *gulube*), **Gwt *kilpay-(ho)*** (<?*gilb-, cf. Tsamai *gilib-ko*), **Dah *gillibe*** (pl.), *gilli* (sing.), **Ong *gibila*** (met.), all < AA *gilb-, nor = i: **Bil *gurb*** (with the rel. Agaw forms) and Shin *gūbra* (met.) < AA *gurb- (to be rather treated separately from AA *gilb-), nor = i: **Iraqw *gurungura*** <?*g^wVr(un)g^wVr- (cf. Alagwa *gurunguda*, Burunge *gurungunda*), rel. to Omot: Mocha *gur-āto*, *She gur-āt*; Ch: Kera *gə̀gə̀r*, Sokoro *gorungorundu* 'knee'; Sem: Arab (dial.) *ʔə̀zər*, Eth *ʔi(n)-*gir* 'foot' (v. SED I, 9), all < AA *g^wVr(g^wVr)-; whether the latter is rel. to AA *gurb- with *-b suffixed is a difficult question.

45. 'know' ◊ b: Eg *rḥ* // hardly = b: **Bil *arʔ***, **Gwt *ar***, **Chara *ar***, **Male *er*** <?*ar- (less probably <?*arḥ-, though the reflexes of AA *ḥ in Cu and Omot are not clear), probably including b: **Mao *ald-*** (<?*ar-d-, acc. to Bla Omot 45.1.) and l: **Had *laʔ-***, poss. <?*raʔ-; neither all these forms nor Eg *rḥ* = b: **Khmt *aarqu*** <?*arḳ- < AA *ʔarḳ- (> Eg 18 Dyn *ʔrḳ* 'understand'). ◊ f: **Amh *awḳ*** // *awwäḳä* < Cu (not. sc.). ◊ h: **Mnd *diy*** // <?*diHiy- (cf. Zime-Batna *diʔi*, Mkk *dóoyè* 'teach'), likely met. rel. to t: **Akk *wadaaʔ-***, **eduuu** (*idû* and *edû* are the commonly quoted forms), **Jib *édaf*** <?*ydf. ◊ e: **Kiir *mam*** // <?*man- (Buli *man*); nth. in com. w. e: **Jib *yárôb*** (a slip?). ◊ i: **Beḍ *kan*** // likely <?*kan- (cf. Somali *oḳón*) = m: **Yaaku *gêeno*** (*qεεnoʔ* Hei Ya) <?*kēn-.

46. 'leaf' ◊ a: Eg *ʔb* // NK *dbʔ* and Med *gʔbt* are the correct forms (<?*gʔb or *gbʔ). ◊ b: **Jib *erqet***, c: **ʔefl** // *erqét* is 'leaf' in Bit 13 (acc. to JJ 292, *érékt* is 'sheet of paper'), an Arabism (not. sc.); *ʔefl* is 'leaf' in Bit 65, not in JJ; *ʔyízf-ot* is 'leaf' in JJ 237 < common MSA *ʔayilf-at. ◊ m: **Bil *aša*** // = n: **Khmt *ḥaca*** (*háša* Bl Ms after Appl, *ḥaça* Bnd LE), **Aun *ḥaaci*** <?*ḥaç-, but not = m?: **Gwt *aahi-čče*** <?*aki-t-, which is rather rel. to m: **Yaaku *éšiʔ*** (*εçeni*, pl. *éçiʔ* Hei Ya;

< *?Vki unless a lw. < GWT); **n**: Khmt *ḥaca*, Aun *ḥaaci*, in their turn, have nth. in com. (a slip?) w. **n**: Dah *śāḥūne* (<*śab-un), likely = **p**: Arb *seeb* (<*śeb-?). ◇ **o**: Maʔa *hopi* // nth. in com. w. **o**: Or *bāla*, Arb *báal* (a slip?). ◇ **q**: Mao *yaç*, *waale* // two different roots, neither having anything in common with **q**: Had *búyya* (slips?); Mao *waale* (<*waʕl-?) is probably met. rel. to **p**: Iraqw *lofo* and Male *ʔilaši* Bnd Om 59 (not in Fl) <*ʔil-aš- <*ʕil-? Cf. also Hebrew *śālā* and Somali *śáleen*, pl. *śáleeemó* id.

47. 'lie' ◇ **a**: Eg *nm* // not *nm*, but *nm*ʕ 'sleep' ('schlafen; im Todesschlaf liegen' EG II 266), not sc. as 'lie' with **a**: ArabSyr *nam*. ◇ **c**: Akk *nʔḥ* // *nāḥu* is 'to rest'; *niāl-* is 'to lie'. ◇ **d**: Copt *ʔenkot-* // continues Eg *kd-t* 'sleep' (<*kd), nth. in com. w. **d**?: Or *erkaḍu* <*hirk-aḍ-, but = Ong *kaada* 'sleep, lie' <*kaḍ-. ◇ **h**: Tuar *enser* // not in available sources; *əns* is 'to lie'. ◇ **z**: Iraqw *hongufus* // *hanguʕ-us* 'heal, rest' (MQK; not sc.); *qaat* is 'lie' (MQK, Magh; 'sleep' in Whit) <*kaṭ-, perhaps = **m**: Hs *kwanta* <*k/kwant-. ◇ **w**: Dah *kaaj* // misleading transcription (*j* inconsistently renders [y], see in 46. 'leaf'): *kāy-* 'lie or put down' EEN 10 (not sc.); *ḥom-* is 'lie, sleep' (<*bVʔ-Vm-?), probably = **p**: Beḍ *bʔa* (*biʔ*, *embiʔ* RBeḍ) and **y**: Maʔa *bodi* <*bo-di (acc. to HRSC 388, -bo).

48. 'liver' ◇ **a**: Eg *mʔst* // (wrong transliteration: *s* renders *z* in EG; *mʔz-t* and *myz-t* are the correct forms) undoubtedly = **p**: Male *mayzi* <*mayʒ/ʒ- (cf. also Basketo *māyiz*, Dokka *maiz*); as to **p**: Mao *mēle* it may or may not be rel. (< *miʒ/ʒ-? Cf. Mao *waale* 'ear' rel. to Male *woyzi* <*waʒ- ?). ◇ **g**: Hs *ha-ntā* (atypical assim. <*ham-t-?), probably = **m**: Yaaku *ahman* <*ʔa-hVm-an. ◇ **ʔ**: Copt *ʔuphaʒi* // a Bohairic word; no term for 'liver' attested in Sahidic. ◇ **e**: Tum *telu* <*tiHl- or rather *ʔil- (probably rel. to Sem: *ʔihāl- ~ *ʔu/alhīm- 'spleen' SED 278), not = **e**?: Or *tiruʔ*, Arb *tirá*, Gwt *tire*, and Maʔa *tiḷao* (*tirao* HRSC), all < AA *tir-, with unclear relations to **e**?: Dime *taaRte* (if *R* renders [y] as in other cases in Fl, *-r > Dime *γ* needs to be proved) and Hamar *tiróḥó* (*tirá+ḥo* and *tʔ'ro+bo*, acc. to Bnd Om 213; -b/b a fossilized suffix?); the latter is a lw. < Or, acc. to Bnd Om 213. ◇ **l**: Had *afáre* // <*ʔafal- (Had -r- <*l- is regular, cf. Sidamo *afale*, Kambatta *afali*), hardly = **l**: Shin *ʔafára*, rather <*Hafar- (> Moča *aḫáro*, Anfillo *afáro*). ◇ **ʔ**: Dizi (no term) // *bo*, *bow* is the term (in [Bla Omot No. 48.5.] rel. to Shako *bo* 'belly' and NOmot *būp- 'chest'; add Sezo *bèi* 'liver').

49. 'long' ◇ **d**: Jib *rihm* // <Sem *rym 'be high, long' (see LGz 478), not = **d**: Amh *rāʒʒim* <*rzm (Amh *rāzzāmü* 'be tall, long'), but = **g**?: Dah *rumāte*

<*rum-at- and, probably, **g: Ong *ɔorma*** <?*V-rVm- (both have nth. in com. w. **g: Izd *yzif***, a slip?); the problem is there are also Hamar *orma* (Bla Ong; not in Fl), Banna id. and Tsamai *orma* 'tall, long' (a lw. < Tsamai or Hamar into Ong or a common S0mot root > Tsamai?). ◇ **c?: Mkk *soɔor*** // neither = **c: Copt *šiai*** continuing Eg Dem *hy, ḥṣiy* (Vyc 259), nor = **c?: Gis *subor*** <*subor- (the Copt and Gis forms have nth. in com. either), but = Beḏ *serāra* (not in Fl) and **e: Bil *šer*** (*šir* R Bil), all < AA *sV?Vr- having nth. in com. w. **e: ArabSyr *tawīl*** (a slip?) and not = **e: Or *dēraʔ*, Arb *dērā*** <?*dēr-; the latter not = **e: Iraqw *čer*** (*čer* MQK; acc. to HRSC 216, <*čeed-: Burunge *čedi*, Alagwa *čer*), which, in its turn, = **?: Mnd *sâde*** (<*čadH-) and, very likely, **r: Dizi *šadn-îs*** <*čad-n-; none of the above = **e?: Had *kērāʔla*** (*kērāla*) <*kērār-. ◇ **i: Kiir *kâsɔai*** // possibly <*kaç-n- = **o: Mao *kwāšâ*** < AA *kʷaç-. ◇ **l: Gwt *sikāpa*** // <*šigab- (Tsamai *zigaba*), met. rel. to **s: Hamar *gúdúb***, all AA <*gʷižab- (Sem *gVdVb-: Arab *šadbat*- 'certain length of a route, distance between two stations', *šdb* 'to pull out' BK 1 268, Jib *gódób*, Mehri *gādōb* id. JMhr 115); **s: Hamar *gúdúb***, whatever alike, rather not = **s: Dime *gudum*** < AA *gʷimaɣ- (Sem: Arab *šmz* 's'eloigner, marcher d'un pas large' <*gmz) to which **k?: Shin *génzá*** (-n- assim. <*m before z) is likely met. rel.

50. 'louse' ◇ **b: Copt *kakte*, a: *sib*** // no *kakte* in Vyc. ◇ **d: Akk *kalma-tu*** // not = **d: ArabSyr *kamli* (*kamel*)**, **Amh *ḵamal*** (v. SED II, forthcoming). ◇ **h: Kiir *kwor kwota*** // lw. (not sc.) < **h: Hs *kwarkwatâ*** < *kʷatkʷat-, rather than <*kwaro 'insect'+*kʷat-, which has nth. in com. (a slip?) w. **h: Had *ibiba*** (a slip?); the latter likely = **k: Bil *bita*** <*bi-t-, **Khmt *bît***. ◇ **Maʔa n: *šo***, **o: *pákácá*** // not in my sources; *gīšo* is 'louse' in Mein 309 and HRSC 386. ◇ **q: Mao *kišé*, Dime *kas*, Hamar *ḵasa*** // very likely = **m: Gwt *isgé*** <*kisk- (Tsamai *q'isk-e*; unless a lw. < Omot or vice versa) < AA *ka/ic-am- (Sem: Ugaritic *ḵšm* 'grasshopper', Arab *ḵašām*- 'locust', v. SED II). ◇ **p: Ong *šamiša*** // probably met. <*šaš-Vm- (cf. the -am- suffix in insect names, like in Sem *kaš-am- above), in which case = **r: Shin *šusa*, Chara *čuuč*, Dizi *čuzžū***; as to **r: Male *čuguč***, it may be a different root as -g- is hard to explain (cf., however, Bnd Om 59).

51. **man** ◇ **b: Akk *eṭl-um*** // rather 'young man'; *zikar-* is the common term for 'man'. ◇ **c: Copt *rem*** // Bohairic *rōm-i*; continues Dem *rmt*, Eg *rmt* <*rVmk or, rather, *lVmk, cf. Fayumic *lōm-i*. Nth. in com. w. **c?: Beḏ *raba***, which is not sc. at that as it is an adj. 'männlich' RBeḏ188 (*tak* is 'man' in Beḏ). ◇ **g?: Izd *a-ryaz*** // <*a-rgaz (Rif *a-rgāz*, etc.) <* -rgaž/3; not = **g: Tuar *a-lâs* (*alâs*)** <*a-halâs. Likely met. rel. to **p: Aun *ɲirži*** (*ngárži* Bl Ms after Beke)

<*nV-garʒ/ʒ-. ◇ **k: Kiir byèt** // probably <Jarawan Bantu CLR I 115, not sc. ◇ **s: Dah ḥaaʒo** // <*ḥayy- = **t: Iraqw ḥawata** (also rel. by HRSC 386). ◇ **u: Ong šoqota** // rather 'male, masculine, vir' (Fl Ong 52; *šoqta* 'male, bull' ST 129) than 'man' (not sc.); **?inta, hinta** is 'man' (*ibid.*) = **v: Mao êntê/êntê**.

52. 'many' ◇ **c: Copt emāšo** // also *m-ašo*, continues **a: Eg fṣ̌** <AA*ʕVĈVr-. ◇ **h: Siwa kum** // unless <Arab *kaʕm-at-* 'heap', likely = **v: Dah káfīme** and, perhaps, **h?: Maʔa kumule** (*kumúre* HRSC 246) <*kum-ur-? ◇ **i: Izd šigan** // <*ki-yiga-n = **g: Tuar a-iʒe-n** (Ahg *a yaḡḡîn*) <*ya-ggay-n and Siwa *waʒin* (not in Fl) <*wa-gVy-n (all <Brb *-gay-) = **x: Mao gyaayê**. ◇ **n: Hs yawà** // perhaps = **y: Shin ayá**. ◇ **o: Mnd kwottya** // <*k^wVt- (= Jegu *kot* 'all') hardly = **o: Beḍ gweda-bi, Arb guudi-da, Ong gedahuni** (all <*g^wVd-). ◇ **q: Bil bayaʒ, Khmt biʒek** // lws. <Eth (LGz 117); *gari-* is the inherited term in Bil (= **m: Kiir gârî**) and *eksät*, in Khmt. ◇ **s: Or hêdu** // likely = **p: Gis haḍa** <*hada (*-d- > -ḍ after a laryngeal).

53. 'meat' ◇ **a: Eg fwf** // met. rel. to **o: Iraqw fuʔunai** (<*ʔuf; cf. Burunge *fuʔum/nay*, Asa *fuʔumay* id.). ◇ **e: Tuar i-san** // pl. of *-say-, most likely <AA *šaʕ- 'large cattle, meat', definitely neither = **e: Mkk séi, Kiir cō, Mnd cūwa** <AA *caw- (AA *ĉ yields Brb *z, not *s), nor = **e: Gis ?iše** (most likely <*ʔiĉ-; acc. to Stolb, AA *š yields Gis ž, AA *ĉ yields Gis š, so Gis *?iše* is hardly rel. to the Mkk, Kiir and Mnd forms); the latter likely = **j: Khmt siyya, Aun iši** <*iški (acc. to Appl VS, Khmt *siyya* is <*siḥ, but, together with Aun *iši*, it is rather <AA *čVʔw- ~ *ʔačw-), **Mao oške, Male aški, Dizi ačku, Chara ačča** (<*ač- in Bnd Om 213) = **e: Or fōni** <*soʔ-n- (f <*s in Or points to AA *ĉ), **Arb soʔ**; none of the forms quoted above = **j: Bil ziga** (*zeḡā*, pl. *zik* RBil, *siha* Bnd LE) <*sig-, Gwt *sakan-ko* <*sagan- (Tsamai *sagan-ku*).

54. 'moon' ◇ **b?: Jib ?erət** // <*ʔari-t-, not = **b: Akk warḥu** <*warḥ-, but = **a?: Tuar éor, Izd a-yur** <*HVyur (hardly = **a: Eg ifh** <*yVʕh-, cf. ECu: Rendille *yéyah* id.) <AA *ʔary- ~ *ʔayur-. ◇ **q: Kiir pyaḥ** // lw., cf. PW Nigrific *pian- CLR I 119. ◇ **g: Beḍ terig** // also *terik*; as -k/g added to *ter- cannot be explained by any phonetic or morphologic process, rather not cognate to **g: Mkk téré, Tum dâr, Mnd tre** (all <*tVr-), but a lw. <S. Eth *ʔaraḥ- including Amh *čārāḥ-a* id. cog. to Arab *ʔāriḥ-* 'morning star'; either the Beḍ or Ch terms have nth. in com. w. **g: Gis kiya** (said in note 41 to be "scored cognate with Mandara purely on the authority of Jungraithmayr & Ibrizimow"). ◇ **j: Had agána, Male agina** // one of the forms seems borrowed from the other (cf. Bnd Om 118 comments on "Macro-Ometo" forms

vs. HEC **agan-a*: "Possible loan, but which direction?"), rather the Had term being the inherited one (in which case the Male term should be considered lw. and not sc.) < HEC **HagVn-* (Burji *agun-čo*, Sidamo *agana*), which may well be < **Hag-Vn-*, with *-Vn-* suffixed = **k: Dah háge** (< Cu **hag-*; cf. also Dasenech *agen-žo* id.). ◇ **i: Maʔa klaʔhe** // mistaken for *mšihe* (HRSC 387)? = **i: Iraqw šaha-ŋw** (also rel. *ibid.*), but not = **i: Gwt leʔayo** and the rel. terms < **liʔ*; in Iraqw and Maʔa neither *š-* < **l-*, nor *-h* < **-ʔ*. ◇ **k: Dizi acim** // < **ʔac-in/m-* (Nao *acin*; cf. Bnd Om 214); nth. in com. w. **k: Dah háge** (a slip?), but likely rel. met. to **l: Mao ʔaansê** and, perhaps, **m: Shin ašisa** < **ʔacic-ʔ* ◇ **i: Ong leʔa** = **i: Gwt leʔayo** and other Cu // undoubtedly a lw. < Tsamai *leeʔ-o* (v. Bla Ong A. 172), not sc.

55. 'mountain' ◇ **a?: Tum dáây** // < **ʔVday* (Ndam *doi*, Miya *dəy*), not = **a: Eg ɖw/ʒw** (< **gVw* or **ç/ç/Vw*, but not < **dVw*), **Copt toow-pi** (*tōw* continuing Eg *ɖw*); likely = **z: Dime êdo** < **ʔadVw-*. ◇ **c: Jib giéʔ** // *giéʔ* JJ 69 (< **gibl*), rather a lw. < Arab than = **c: ArabSyr ʒabal** < **gabal-*; *hēr* < **himir-* is the inherited Jib term for 'mountain' (not in Bit and Fl). ◇ **d: Amh tárara** // perhaps < Cu (e.g. Kemant *tarārā*, Muniye *tarra*); in any case, neither = **d: Tuar and Siwa a-drar** (= Chara *dera* 'mountain', not in Fl), nor = **d?: Izd aʔari** (*aʔari* is correct) < Arab *ʔurʔat-* 'mountain top' (obviously, the Tuar and Siwa terms have nth. in com. w. the Izd one). ◇ **g: Hs tudu** // 'high ground' (not sc.); *duçè* is 'mountain; stone'. ◇ **n: Arb ʔel** // nth. in com. w. **n: Bil giit** pl. (a slip?). ◇ **s: Maʔa bwʔao** // likely met. rel. to **l: Khmt aba** and Bil *ambá* (RBil, not in Fl) < **ʔab-*. ◇ **@: Hamar ɖuka** // acc. to Bnd Om 214, *ɖuka* (assim. < **duk-*), very likely = Tuar *a-dyaγ* (one of the two main terms for 'mountain' in Ahg; not in Fl) < **-daʔak-*.

56. 'mouth' ◇ **b: ArabSyr tumm** < *fumm* // < **tumm-*, not < **fumm-* (cf. Jordanian Arabic *timm*), not = **b: Akk pû-**, **Amh af** and the similar terms sc. "b"; probably = **j: Had suume** (both < AA **čumm-*). ◇ **d: Tuar e-mi, Izd i-mi, etc.** // < **ʔimi* or **yVmi* (the Anlaut *i-* is stable: pl. *imaw-ən*) = **d: Yaaku mēʔ** and = **i: Maʔa (mu)-ʔo** if, acc. to HRSC 387, *mu-* is not a prefix, but, on the contrary, represents a root (in this case, not = **i: Arb ʔohó**); all these forms rather not = **d: Siwa ambu** (pl. *mba-wən*) < **ʔa(m)bVw-*, which is probably rel. to **e: Hs bāki, Tum bâg, Kiir pyik** < **ba/ik-*, likely < **ba/i-k-*, with a body-part *-k* suffix (cf. Migama *bí*, Bolewa *bò* id.); the latter ones rather not = **e: Gwt pa-ko** (the morpheme division should be *pak-o*, as *-k-* etymologically is not a suffix, but part of the root) < **bag-* (Tsamai *bago*). ◇ **l: Male ɖango** // not = **l: Shin noona, Chara nona**.

57. 'name' \diamond **a**: **Eg** *rn* // as there is no known AA cognates, can it be a lw. <NS? Cf. Dinka *rin*, Moro *irəŋ*. \diamond **b**: **Siwa** *smiât* // lw. <Arab, not sc. \diamond **c**: **Or** *maḳa?* // nth. in com. w. **c**: **Mnd** *žira* (*zhira* CLR II; < **zir-*, cf. Laamang *zórú*); a slip? \diamond **e**: **Dah** *sáre* // <Bantu EEN 24; not sc. \diamond **h**: **Ong** *miša*, **Dime** *mízi* // rather met. < **sim-* than an unrelated root; anyway, Dime -z- < *s needs proof.

58. 'neck' \diamond **c**: **Akk** *ḥarur-tu* // 'throat', not sc.; *kišād-* is 'neck', met. rel. to **w**: **Mao** *kidiše*. \diamond **h**: **Tuar** *i-ri* // *iri* < **yiri* or **Hiri*, not = **h?** **Tum** *gēr* (< **gVr-*, cf. Sokoro *gèrè*), but = **k**: **Kiir** *uyar* (acc. to Fl, < **gwar*, but this is not so) and, probably, **h?**: **Hs** *wuyā*, both < **wuyar-* (cf. also Jimi *yaro*, Miya *wir*, Siri *yere*, Kulere *wur*, etc.). \diamond **k**: **Mkk** *neḏe* // not in Jg Mkk (*góllá* and *?óré* are given for 'neck'); anyway nth. in com. w. **k**: **Kiir** *uyar* (a slip?). \diamond **n**: **Bil** *halḳum* // 'throat' (not sc.) and very likely a lw. <Eth (e. g. Tigre *ḥalḳəm*) <Sem **ḥalḳum-* 'faucis; Adam's apple' (e. g. Mhr *ḥalḳəmūt*, v. SED No. 117); hence, not = **n**: **Arb** *lúko* and **Ong** *luyoma* (which are perhaps met. rel. to **o**: **Khmt** *qālmā* [CR Khm], *qāлма* [Appl Khm]); *kirmá* (= Ghadames *ta-kurəm-t*, Shawiya *ṭa-krum-t* id.) and *gúrg* are the main terms for 'neck' in Bil, the latter = **j?**: **Aun** *gurgum* (both < **gurg-um-*, cf. also SED I, No. 93) to be treated as non-cog. to **j**: **Izd** *a-geḗḏ*, at least on our present level of knowledge, as, on the one hand, the dentals do not yield *θ* in Agaw and, on the other, no *-ḏ* nominal suffix is established in Brb (cf., however, Cu-Omot **sin-* ~ **siṇḏ/ṭ-* 'nose' below); the latter probably = **z**: **Male** *korčo* and **lw?**: **Hamar** *korči* (hardly a lw. as Fl suspects; cf. Ari *ḳurči*, *guúrzi* Bnd Om 214), < **gurt/ṭ-*, with **ḳ-* assim. < **g-* under the influence of **-ṭ-*?

59. 'new' \diamond **b**: **Akk** *eššu* // = **e**: **Amh** *addis*, both <Sem **ḥad(i)š-* <AA **ḥads-*; not = **b?**: **Aun** *əskawi*. \diamond **h**: **Mkk** *dáálà*, **Mnd** *dāwale* // < **dawal-*, nth. in com. w. **h**: **Siwa** *a-trar*. \diamond **c?**: **Kiir** *pyelè* // acc. to CLR I 127, a lw. <NS. \diamond **k**: **Gis** *nawaya* // < **naway-* ~ **yawin-* (cf. Daba *yìwīn*), very likely = **g**: **Tuar** *inai* (vb.) < **yVnay*. \diamond **n**: **Khmt** *aayir* // < **hayir* (Waag *háir*) = **o**: **Or** *haaraá*, **Arb** *hāráay*, **Had** *hāre-ččo*. \diamond **v**: **Chara** *meera* // probably = **a**: **Eg** *mʷy* (if < **mVr*; cf. also E. Chad. Migama *máràwtà* id.).

60. 'night' \diamond **b**: **Akk** *mūšu* // = Iraqw *amsi?* (MQK, not in Fl). \diamond **e**: **Tuar** *e-hoḏ*, **Izd** *īḏ* // = **f**: **Siwa** *dagiāt* (*dag-yaḏ* is rather 'at night'; *iṭ* is 'night'), all either < **yiHʷad-* (then likely = **l**: **Beḏ** *hawad* <AA **ḥawad/ṭ-* or **hawad/ṭ-*, cf. E. Cu.: Dirayta *awwadḏ* id. and S. Cu.: Dah *hèḏḏo* 'evening') or **biHaḏ-* (Ghadames *ībeḏ*; then <Brb-Ch **biHaḏ-*: Karekare *bèḏḏi*, Gude *vida*, Glavda

ááwəḍà, Sokoro bàḍúm, etc.). ◇ **q**: **Maʔa ama** // < *ham- = **p**: **Had hiima** and **Dah hiima**, and not = **q**: **Gwt awne**, **Yaaku awn**. ◇ **aʔ**: **Ong ʃuo**, **Eg wḥ-t** // doubtful as **Eg *ḥ** hardly corresponds to **Ong ʃ**. ◇ **s**: **Shin tuwa**, **Male ḍuumi**, **Mao dúúmê** // rel. if -m- is suffixed in Male and Mao or if *m- > Shin -w-, which needs proof.

61. 'nose' ◇ **a**: **Eg fnd/fnd** // *fnd*, either < *fVnVç/ṭ/ĉ- (then rel. to **a**: **Amh afənča**) or *fVnVg- (cf. C. Ch: Muktele fíngí 'blow one's nose'), then likely met. rel. to **h**: **Beḍ ginuf**, which hardly = **h**: **Bil kunba**, as neither *k- > Beḍ g, nor *b > Beḍ f). ◇ **d**: **Tuar a-nḣur** // *Ahg a-nḣur* < *ngur < AA *nVḣur = **dʔ**: **Jib naḣrer**, **ArabSyr mənḣar**, but not = **d**: **Siwa ta-nzär-t**, **Izd a-nzar** < *nVzar- (Brb *z may continue AA *z, *ḣ, *c and *ĉ). ◇ **e**: **Hs (ha)-nči** // *hánčii*, pl. *hantuna* < *ha-n-tun-, not = **e**: **Mkk ʔonde** (not in JMkk and CLR II which gives *búndi-só*), but rel. to **g**: **Gis hâtan** (cf. also Migama *ʔítín*, Jegu *ʔètèntó*, etc.) and probably **g**: **Mnd âtare** (< *hatan- ?). ◇ **i**: **Iraqw duḡaʔ** // < *dung- or *rung-, not *nung- (cf. HRSC 389), not = **i**: **Yaaku núkaʔ**, **Maʔa nuḡa**, **Dime nuku**, **Hamar núki** < *nu(n)k-. ◇ **f**: **Tumak hun** < *sun, **Kiir (i-)sâ**, **Khmt îsîḡ**, **Aun îsan**, **Or fuññān**, **Arb sōnó**, **Had sané**, **Dah sína**, **Ong siina**, **Dizi sin** ~ *siḡ* // all < *sVn- (only tentatively = **f**: **Gaw sinḡe**, **Mao šiintê**, **Shin šínṭa**, **Cha sinḡa**, **Male šiidi**, all < *sinḡ/ṭ-. As the origin of *-ḡ/ṭ- is not clear (another fossilized body-part suffix? a result of some unknown contamination?), Cu-Omot *sinḡ/ṭ- is probably to be treated as a separate root.

62. 'not' (not included into Fleming's lists) ◇ **Ong mi-** 'verb prefix, negative, non-imperative' (FI Ong 40) = **Hamar -ma** [Bla Omot after Fleming], (?) **Arb máala** < *ma-ala*? (also *Afar mā-*, *Somali má...in*), **ArabSyr mū**.

63. 'one' ◇ **a**: **Eg wʃ**, **Copt waʔ**, **Maʔa we** // < *wVʃ-, perhaps = **d**: **Tuar ien** (m.), **iet** (f.) and other Brb < *yaw-n/t, possibly < *yaʃw-, but not = **a**: **ArabSyr waḥid**, **Amh and** < Sem *w/ʔaḥVd-; the latter likely = **h**: **Hs ḡáyáa** (cf. *Karekare wáḡi*, *Bachama híḡò*, *Zime-Bata ḡāuʔ*, all < *Haday- ~ *wVHid-) and = **a**: **Yaaku wêhêt** (*wêhe*, *wêhetu* Hei Ya), possibly < *wVḣVd-. ◇ **i**: **Mnd palle**, **Gis pal**, **j**: **Gis bula** // both **Gis** forms seem variants of the same root; acc. to CLR I, 131, likely < Kanuri *fal* (cf., however *Aun empèl* [CR Aw 143], prob. implying AA *ʔVm-pal-). ◇ **m**: **Or tokko**, **Arb takká** // rel. to **t**: **Dah watt-ukwe** (*wattúkwe* EEN 43). All are compound words consisting of two main components: *tV(?) and *(V)kaw, or *(V)k^w, the first = **mʔ**: **Gwt toʔon** (< *tVʔ-, cf. *Afar tiya* id.) and the second = **a**: **Iraqw wak** and **p**: **Shin ikke** (cf. also *Afar in-ik*, *Som kow*), **Mao iške** (< *ʃis-kV); the latter's first component,

iš < *ʕis- = **p?**: **Chara issa** (cf. also Wolaita *issō, istā, issinō*) = **b**: **Akk ištēn-** (< *ʕišt-ān- < AA *ʕis-t-an-) and probably **e**: **Mkk sòò** (cf. *sòŋ* 'each one' < *san? Cf. Guruntum *ša*).

64. 'person' ◇ **a**: **Eg z/s // z(y)**, not = **a**: **Mao eesâ, Shin ʔaša, Chara atse** (*accā* and *asā* Bnd Om 92 after Cerulli), **Male asi** (*ʔas-, rel. to Sem *ʔayš-). ◇ **d**: **Jib nafs, e: ensi** // both are lws. < Arab, not sc. (besides, *ʔensi* is an adjective 'human' JJ 4; 'menschlich' acc. to Bit 13). ◇ **h**: **Tuar awadem** // *aw Adəm* 'son of Adam', an Arabism (not sc.); *yən* 'one' < *yaw-n/t (< *yaʕw-) is used for 'person' in Ahg and other Tuar, likely = **t**: **Yaaku yie?** and Dime *ʔyyí* (in this case, also rel. to the terms for 'one'). ◇ **h**: **Mkk wèdi-sú** // cannot = **h**: Tuar *awadem* (see above), but likely = **x**: **Hamar eedi**. ◇ **m**: **Bed tak** // rather 'man', while *ha* is 'person' (RBeḏ), likely = **u**: **Maʔa he** and **Iraqw hee**. ◇ **s**: **Gwt ǵawho** // *qawho* < *kaw-ko (Tsamai *qau-ko* 'man'), not = **s**: **Dah ǵúho**, but probably = **o**: **Aun aqi** < *ʔaq- (cf. Khmt pl. *ǵk*).

65. 'rain' ◇ **f**: **Tuar i-wot** // not in my sources; the regular term is *a-ǵanna* < *gVn-. ◇ **e**: **Siwa a-nzar, Izd a-nzar** // < *nzar (Brb *z* may continue AA *ç, *č and *ĉ), neither = **e**: **ArabSyr maʔar** nor **e?**: **Mkk mizzi** (the latter two are neither rel.). ◇ **l**: **Bil zuwa, Khmt suwa** // < *suw-, hardly = **l**: **Yaaku sôhó** (*-h must not yield *o* in Bil and Khmt), but prob. met. rel. to **a?**: **Ong haaje** (in fact, *haaže*, cf. SLLE); the latter is hardly rel. to **a**: **Eg hwy-t** unless Ong *ǵ* can reflect *-y(y)- (besides in Ong *h is expected to render *h* not *h*). ◇ **g**: **Hs ruwa-n-samā** // lit. 'water of the sky'; *ruwā* 'water; rain' = **i**: **Aun ri/êri** (*ǵri*), **Arb ʔiriy, Gwt irrawo, Maʔa re, Dizi iru, Chara ira** (also Soqotri *riho* 'water'), all < AA < *ʔi-ra/iw-; probably rel. to **i**: **Male irzi** (though the origin of *-zi* attested in Male nouns still needs clarification). ◇ **p**: **Iraqw ǵuway** // < *ǵubay (cf. Alagwa Burunge *ǵubay*), not = **p**: **Dizi diêb, Dime deebi, Hamar doobi**.

66. 'red' ◇ **b**: **Akk šamn-um** // 'oil, fat, cream', probably a slip mistake for *sām-* 'red'. ◇ **f**: **Tuar ihaggayen** // Ahg < *hawway- (*ihway* 'be red') = **g**: **Siwa azgay, Izd azuggway** (all < *zawway) and **y**: **Male zoqe** (Oyda *zoqo*, Bencho *zōkə*) < AA *ʔ/ǵawq-. The relation of Male *zoqe* to **y**: **Hamar zia, zo** < *ʔ/ǵiʔw- is problematic as *k does not seem to yield *o* in Hamar; as to **y**: **Chara zua** (or *zoʔa*), it may continue either < *ʔ/ǵVʔ- or < *ʔ/ǵawq-. The Hamar (and Chara?) term may alternatively = **h**: **Mkk tēze**, likely < *ta-ʔ/ǵa, and **k**: **Hs ǵā** < *ǵa(?) (cf. Jimbin *ǵiyu*, Bokkos *ǵuwi* 'yellow') and **v**: **Iraqw daʔat** (likely < *ǵ/ǵaʕ-at-). ◇ **k**: **Mnd ǵa-gana** // *ǵagana* (hardly a compound

word, whose first element = **k**: **Hs** *žā*, see above) < **žagan-*, likely rel. met. to **l**: **Gis** *gagazan* < **ga(ʒ/ʒ)gaʒ/ʒan-*.

67. 'road' ◇ **a**: **Eg** *wʔt* // *wʔ-t* < **wVr-* = **d**: **Jib** *ʔorm* (Mehri *ḥürum*, Harsusi *wōrem*, Soqotri *ʔórim* < **ʔ/wVr-m-*) = **x**: **Shin** *wéera* < **wVr-* (Kafa *wore-tō*), likely met. rel. to Iraqw *irwā* (not in Fl), all < **ʔ/wVr-m-* (probably also **i**: **Mkk** *ʔúrzi* < **ʔur-si* < **ʔur-ʔ* Cf. Bidiya *ʔóra* id.). ◇ **f**: **ArabSyr** *darb* // met. rel. to **g**: **Tuar** *a-barad*, **Izd** *a-brid* and, perhaps, **k**: **Kiir** *ladap* < **radab-ʔ*). ◇ **eʔ**: **Mnd** *ʔungule* // *úŋŋùlè*, not = **e**: **Amh** *māngād* < **ma-ngad-*. ◇ **lw.**: **Beḍ** *darab* // the inherited terms are *lagi* and *sállā*. ◇ **n**: **Bil** *dakw* // not in the sources available; in PBil 101 means 'vorübergang, zeitforge' < *dakw* 'vorüberziehen, vorbeigehen'; *gūg*, pl. *gúkek*, and *giʔd*, pl. *giʔz* are terms for 'road' in Bil. ◇ **p**: **Aun** *dād* // < **dād* (redupl., cf. Burji *dāw-a* 'path'), hardly = **pʔ**: **Yaaku** *dār* (*-*r* yields in Aun neither -*d* nor 0). ◇ **z**: **Male** *goyci*, **Hamar** *goyti* // < Omot **goy-t-* (Anfillo *gōtto*) ~ **go(y)g(oy)-* (Ari *gōgi*) = **o**: **Khmt** *gug*, **Had** *goga*, all < AA **g^(w)Vy(-t)-* ~ **g^(w)Vyg^(w)Vy-*.

68. 'root' ◇ **c**: Copt *nuun-iti* // *nowne* continues Dem *nn.t* Vyc143, nth. in com. w. either **c**: **Mkk** *sòttó* or **c**: **Or** *hídda* < **hind-* (Borana dial. *hunda*), **Arb** *hízz*, **Gwt** *hitte* < **hinʒ/ʒ-* (cf. PEC 20); the latter three have nth. in com. w. Mkk either. ◇ **b**: **Akk** *šuršu*, **ArabSyr** *širš*, **Amh** *sər* // < Sem **šu/ir(š)-* = **b**: **Tum** *hārāu* < **siraw* (Ndam *sírwé*) < **čiraw*, **Kiir** *šéri* < **čVr-*, **Hs** *saye* < **sal* (*sāywāá* CLR II; rather < **sar-* < **čar-*), **Mnd** *šalwa/talwa* (*šállwā*) < **čar(w)-*, **Gis** *šasalak* < **čarčar-ak*), all < AA **čVr(čVr)-*, probably = **c**: **Mkk** *sòttó*, likely assim. < **sorto* (< **čur-t*); relation to **b**: **Jib** *široh* is problematic, as the origin of -*h* lacks explanation. ◇ Neither of the above forms = **b**: **Tuar** *a-zar* / *a-sur* as Ahg *a-zar* (not *a-zar*) and *a-sur* mean 'nerve' (*eke* is 'root'), or = **b**: **Khmt** *sur/sir*, **Aun** *sirwâ*, which are lws. < Eth (Aun *žabi* is the inherited term for 'root'), or = **b**: **Bil** *zir*, the latter likely = **h**: **Iraqw** *defar*, possibly < **ʒ/ʒVr-*, and Dah *dara* 'root' (Bl Ms after Tosco; Fl quotes **f**: **Dah** *múrunge*, which is a lw. acc. to EEN 39), possibly < **ʒ/ʒar-* (Iraqw -*ʔ-* vs. Dah 0 remains unexplained) and probably **b**: **Izd** *a-zur* (if *z* reflects *-*zH-*, cf. Iraqw).

69. 'round' ◇ **a**: **Eg** *dbn* // < **dVbVl-* = **Beḍ** *debāl* RBeḍ (not in Fl) and perhaps = **n**: **Male** *dulaʔo* < **dVwVl-* < **dVbVl-ʔ*). ◇ **e**: **Akk** *kippa-tu* // 'circle, loop, hoop', not sc. (anyway, hardly rel. to **e**: **Amh** *kibb*); *garr-* is 'round (spherical or cylindrical)' CAD g 51 = **gʔ**: **Shin** *gúúra* and, perhaps, **g**: **Yaaku**, if it is *gorgorsiʔ* (Hei Ya) < **gorgor-* (not cognate, if *gorgorsiʔ* as in Fl,

<**korqor-*). ◇ **c:** **Jib** *žaʔalor*, **d:** *mḥer* // as for *žaʔalor*, it is hard to say what is meant (nothing of the kind either in JJ or Bit); *mḥer* is 'rund' in Bit 51 (not in JJ; unless < Arab *mihwar-*, name of various round implements, see BK 1 511). ◇ **g:** **Tuar** *i-kriri*, **Had** *kululeta* // <**k^wVr(ir)-* (Ahg *keruri* means 'être en boule' Fouc 890, not sc.; *ḡələl-ət* is 'être rond' Fouc 433), neither = **g:** **Yaaku** (see above), nor = **g?:** **Shin** *gúúra* <**gur*, nor = **g:** **Dah** *kiringering*, a lw. <Bantu (EEN 11), nor = **g:** **Beḍ** *kwaḍaḍ* (after Roper and Hudson 1964, not in RBeḍ) as Beḍ *ḍ* is < AA **t*, not **r*; the latter is poss. <**ḳ^waḷaḷ-* = **b:** **Copt** *koote* 'to encircle, turn, etc.' (conventionally sc.) continuing Eg *ḳdy* [Vyc 89], poss. <**ḳVṭy-*. ◇ **h:** **Kiir** *šuwe*, **Mnd** *so* // nth. in com. w. **h:** **Or** *nanno* (a slip?). ◇ **?:** **Hs** // perhaps *ḳawanya* (not quite 'round', but a series of close meanings Abr Hs 508), probably = Had *ḳūnḳamma* (not in Fl; though said to be derived from *ḳúnḳa* 'egg' HEC, formally fits Hs *ḳawanya* exactly) <**ḳawan(ḳ)-*. ◇ **i:** **Arb** *mar-* // 'be wrapped, wound round', not sc. (in any case, hardly = **i:** **Ong** *mulq'o* (neither in ST nor in SLLE) and Dime *mil/mul*, as Arb *-r* does not continue **l*, while **-r* > *-l* in Ong and Dime needs proof); the relations between the Ong and Dime words also problematic as *-q'* in Ong lacks explanation.

70. 'sand' ◇ **b:** **Jib** *aḷah* // Bit 14 (not in JJ); anyway, hardly = **b:** **Gwt** *taḥa-kko* and **Yaaku** *təḥei*, both <**taḥay-*, as **t* does not seem to yield *t* in Gwt and Yaaku. ◇ **f:** **Siwa** *ižidi* // not in Lao where *ərrəmel* (<Arab) is given for 'sable' and *i-ždi* for 'terre'. ◇ **a:** **Beḍ** *asse* // *híssay*, *íssa* RBeḍ, *haš* Bnd LE (<**ḥVs-*) = **a?:** **Amh** *aššāwa* <**ḥašaw-* <AA **ḥasaw-* and **t:** **Iraqw** *ḥasam* <**ḥas-* (see MQK 49), but not = **a:** **Eg** *šfy*, **Copt** *šoo-pi*. ◇ **e:** **Tuar** *a-mlal* // only in Taneslemt, another Tuareg language, but not in Ahg where *e-dəhi* is 'sand'. ◇ **m:** **Gis** *čimiyew* // <**čimiH-*, probably = **u:** **Ong** *šumaḥa* [Fl] (*šumaha* SLLE, *šumaḥa* ST; <**čumaH-*? Unless <Tsamai *šomah-tu* SLLE) = **z:** **Hamar** *šami*. ◇ **v:** **Chara** *amča* // and *ámša* (cf. Bnd 93), likely <**?a-mans/č-*: Kachama *mansa*, Koyra *manča*, Basketo *mašint* (met.), perhaps = **o:** **Or** *maánsa*, unless the latter is *maán-sa* <**man-t-* or a lw. <Omot (so Sas Brj 138).

71. 'say' ◇ **a:** **Eg** *jd* // *j* is again inconsistently used for *ž* or *ḍ* (cf. **b:** **Akk** *qabaj*, where *j* stands for [y]; note that Akk *ḳabû* is the accepted form); in the present case it is *ḍḍ* (otherwise *žḍ*) <**gVṭ*, correctly rel. in Fl to **a?:** **Or** *žéd*, **Arb** *geḍ* <**geṭ-*, but erroneously to **a?:** **Shin** *éta/érá* (*ēt* > *ēr*' Bnd Om 172 after Plazikowsky-Brauner; anyway, nth. in com. w. the Eg or Or forms). ◇ **e:** **Gwt** *pay* // <**bay-* (Tsamai *bey*), **Maʔa** *baʔ* = **e?:** **Gis** *ḥe* <**bVʔ-* or

*?Vbay- (probably also **e?**: **Mnd bane** or *bənbà* Kraft <*ba(n)ba?) = Dah ?ibey- (EEN 22; Fl gives no term for Dah), all <AA *?ibay- ~ *ba?-, but not = **e**: **Amh: bāl** (the same root as **d**: **Amh alä** <*bhl LGz 89). ◇ **Tuar g: in, h: enniy** // in Ahg only *ənn* <*yannaaw (Ayr *ənnu*, etc.) = **g: Izd ini = m: Kiir nwi**. ◇ **j: Izd siwel** // 'speak (parler)', not sc. ◇ **q: Iraqw o?** // oo? MQK = **s: Mao wi**, both <*wiʕ- (rel. to E. Cu *waʕ- PEC 42); neither = **q: Khmt Aun duq** (a slip?), nor = **q: Yaaku oh/ok** (*okhoi* Bla Ms; *oko* 'speak' Hei Ya); the latter may be <*?oghoy- = **u: Male ge?**, **Dizi geg** (redupl.), **Dime gēmu** (<*gayH-m-), **Hamar gi**, all <Omot*gayh-.

72. 'see' ◇ **Izd h: raʔa, i: mnid** // *raʔa* is a lw. <Arab; *mnid* is 'look forward', not sc. (anyway, nth. in com. w. **i: Khmt qalu**; a slip?); *inni* is 'see' = **b: Tuar aŋhi**. ◇ **k: Tum kà, Kiir kwe = k?: Gaw hi?** <*kiʔ-, not = **k: Hs ga/ganii**. ◇ **h: Bil arik** // not in my sources; *qwał* is 'see' R Bil (*qwal*- Appl IC) = **i: Khmt qalu**. ◇ **h: Beḍ erh** // <*?Vrh or, rather, <*?Vrh, likely = Copt Sahidic *eiorh*, Bohairic *iorh* 'see, look' (not in Fl; hardly <*ir.t* with "added", i.e. unmotivated *h*, as in Vyc 67), cannot = **h: Izd raʔa** which is a lw. <Arab; neither = **h: Or arg, Arb ʔaarg** (*g- > g, not h, in Beḍ), nor = **h: Iraqw an/ar** (no *an* in my sources; *ar* is < Cu-Omot *ʔar- 'know, find, see'); the latter is not rel. to the Or and Arb forms either. ◇ **n: Ong yop** // undoubtedly = **s: Dime yeef**.

73. 'seed' ◇ **d: Tuar t-i-fes-t, Izd i-fs, Bil fadan** // Bil *fäd-än* <*faʒ/ʒ-an- (cf. Kemant *fäz-än*) not rel. to Berb *fis-. ◇ **e: Arb báádo, e?: Gwt podaho, e: Hamar beta, lw: Ong baḍaho** // also *bodoḥo* Fl Ong, cf. "Both the Gawwata and Ongota forms are isolated, direction of borrowing is unclear" (Fl note 48). Arb and Gwt (<*baḍah- <*baʔah-) are rather lws. <Omot: Hamar Galila *beta*, Karo *peta* (v. Bnd Om 216), Zergulla *biçetta* (Bla Om), all <POmot *biʔaH-; nth. in com. w. **e: Hs iri** (a slip?); the latter likely = **b?: Chara yer** (hardly <*ʒ/ʒVr-, as *ʒ and ʒ seem to yield z, not y in Chara; cf. also Bnd Om 93), not = **b: Akk zēr-, Amh zār**, as for **b?: Male zērci**, it is rather a lw. < Amh than an inherited word (cf. Bnd Om 93).

74. 'sit' ◇ **g: Tuar ʔaim** (an outdated French way of rendering *γ* as *r*; *γaym* is the correct form) = **i: Siwa Izd qim**, all Berb forms <*qaym. ◇ **f: Tuar assis** // no *assis* in Tuar or anywhere (a mistake for 'être assis'). ◇ **c?: Bil kaf-y** // a lw. < Tigrinña *kof bälä* (with a safe Sem. etymology: Arab *wukf*- 'tapis...pour s'y asseoir', Mehri *šə-wkūf* 'to lie'). ◇ **h: Siwa nan/ʔaʕan** // no *nan* in my sources; *ʔanʕan* is an Arabism, not sc. ◇ **n: Mnd nʒa** // <*nVʒa or

nVžak* (Mofu *-nž-*, *nžǎkwám*, Glavda *ndzah*, Guduf *ndzəgàna*, Daba *ndzhà*), likely = **r: **Aun** *inžku-ŋ* < **in-žVk-* or **inž-Vk-* (Kunfal *enž*; cf. also Dase-nech *dik-* < **ž/žik-*) and probably = **w**: **Maʔa** *zoho-di* (-*zoko* HRSC 388) < **žok-*.
 ◇ **q**: **Khmt** *qôy-u* // acc. to Appl Khm and CR Khm, *gwâyyyu* < **gʷay(H)-* = **v**: **Dah** *gwaḥ*. ◇ **p**?: **Arb** *siyʔ/sidi* // -*siye* (*sidi* is < **siʔ-d-*) = **p**: **Bed** *sāʔ*. ◇ **e**?: **Gwt** *ʔakkad* // *ʔakk-ad*, not = **e**: **ArabSyr** *qafad*, but probably met. rel. to **q**: **Mao** *kú-i*, **Chara** *kot-ət* (< **kuʔ-*? Cf. also Konso *kutiʔ-*, likely met. < **kuʔ-t-*). ◇ **z**: **Shin** *beo* // *bèy-* LambSh; < **bVy-t-* (cf. Oyda *béʔ-t-*), likely = **x**: **Iraqw** *iwiʔ* < **ʔibit-* (Burunge *ibid-*, Alagwa *ibit*) < **ʔibi-t-*. ◇ **\$**: **Dime** *dáhân* // *dah* (in Bnd Om 216 rel. to Ari *doʔ-* and *dook-*, *doḵ-* < **doḵ-*; the latter is rather rel. to Hamar *dorrḵ*); hardly unrel. to @: **Male** *dêʔ-*.

75. 'skin' ◇ **d**: **Jib** *gôd* // < **gild-*, pl. *gízéd*, not = **d**: **Amh** *ḵoda*, but = **e**: **ArabSyr** *žild* < **gild-*, and likely **g**: **Mkk** *golmodo* (met. < **gVld-Vm-*?). ◇ **j**: **Kiir** *kwaar* // either < **kʷaHar-* (then likely = **q**: **Yaaku** *hreke*, with met., and **q**?: **Iraqw** *kahari*) or < **kʷaHar-* (= Elmolo *úrat*, poss. < **ḵur-at*, and Tsamai *qúuro*); anyway, not = **j**?: **Gis** *garak*, rather < **gara-k* (cf. Sumrai *gàrè*, Ndam *gārè*). ◇ **b**?: **Had** *omacčo* // < **Homad-t-*, pl. *omadda* HEC 79, not = **b**: **Akk** *mašku*.

76. 'sleep' ◇ **d**: **Copt** *hinēb* // dissim. < **hinēm* (Bohairic *hinīm*) = **b**: **Eg** *nmf*. ◇ **Mkk** **i**: *mōn*, **j**: (*t*)*ùgídè* // *mònonè* (noun), not sc.; (*t*)*ùgídè* < **ʔugi-d-* likely met. rel. to **w**: **Chara** *giʔ*, **Dah** *giiʔ* HRSC 388 (not in Fl; < **giʔ-t-*?) and **Iraqw** *gūʔ-ut* (not in Fl, v. below). ◇ **Arb** **l**: *barž*, **s**: *ḵif* // *barž* is 'pass the night', *ḵif* is 'lie down' (none is sc.); *ʔinḵó* is 'to sleep' likely < **ʔi-nVḵ-* = **y**: **Dime** *naḥt* < **naḵ-t* (Cf. Bnd Ar 137-8). ◇ **t**: **Had** *dirir* // noun (HEC 136), not sc.; *iinseʔ-* is 'to sleep'. ◇ **lw**?: **Gaw** *raf* // a common Dullay root (Gollango and Tsamai id.), hardly a lw. (<Or). ◇ **q**: **Maʔa** *sai* // HRSC 388 gives -*ʔi* for 'sleep'; anyway, *sai* not = **q**: **Aun** *saqi-ŋ* < **saḵ-* and **q**?: **Dizi** *sog* (even if Dizi -*g* continues **ḵ*), as **ḵ* > *k/h*, not *0*, in Maʔa. ◇ **a**: **Iraqw** *qat* // 'lie' HRSC and MQK, not sc. (in any case, not = **a**: **Eg** *ḵd* and **Ong** *ḵaada*, as **-d* does not yield -*t* in **Iraqw**); *gūʔ-ut* is 'to sleep' in **Iraqw** (v. above). ◇ **u**: **Mao** *hāl-a* // nth. in com. w. **u**: **Dah** *ḵom* and **Yaaku** *pom* (a slip?).

77. 'small' ◇ **e**: **Amh** *ḵannəš* // lw. <Or *ḵinnoo-šee*, not sc., so cannot = **e**?: **Khmt** *âtni* (*ʔaḵən* Bl Ms after Appl), which is met. rel. to **Yaaku** *-dein* 'small' (Hei Ya; not in Fl) and **Saho** *Afar* *ʔund* id. ◇ **g**: **Siwa** *žir* // no *žir* in my sources; *aḵkik* is 'small' in **Siwa**. ◇ **n**: **Gis** *mečidek* // < **mV-ḵiḵik-*, likely assim. <AA **dVḵ-* (WCh: **Boghom** *kō-dók*, **Dwot** *ndək* 'short', **Sem** **dkḵ* 'be thin,

small', ECu: Somali *dīq-* 'become faint, tenuous') = **m?: Or *diqqa?*, Male *daka*** (<**ṭak-*, with a "shift of emphasis"); neither of the above forms seems rel. to **m?: Dime *čēkḳ***, which, if assim. <**čigg-*, is rel. to **h: Izd *mzy*** <**mV-zig* (cf. Zenaga *mā-zzūg*, Semlal *im-zig* vb.) and **p: Bil *šug/ḡ*** (vb.) R Bil (cf. Dembea Qwara *šegū*) <**cag^{w-}*, acc. to Appl VS, prob. further <**čig^{w-}* (cf. Khamir *čiqū*, assim. <**čig^{w-}*?) < AA **č/čig^{w-}* (cf. also Bla Omot No. 78.3.), probably met. rel. to **n: Arb *gīččā*** < AA **g^wič/č-* (NOMot: Ganjule Gidicho Kachama *gūčī*). ◇ **q: Aun *cīli*** // <**cil-* (cf. Kunfal *šeliy*, Damot *šellā*), nth. in com. w. **q: Ong *monnufeni*** (a slip?), *munna?enə* SLLE, *munnuḷuni* ST <**munnVḷ/?-uni*, rel. to **j: Tum *mánūi*** and **j?: Dah *ṭāmína***, Maʔa *mʔinyí* (not in Fl). ◇ **o: Had *hóffo*, o: Beḍ *dabal*, o: Male *šanki*** // three different roots having nth. in com. (all slips?). ◇ **p: Yaaku *niʔin*, Iraqw *niina*** (also = Dasenech *ninen*, Elmolo *ninina*) cannot = **p: Bil *šug*** (a slip?).

78. 'smoke' ◇ **d: Jib *mândôh*** // *mā-ndoḥ* (Mehri *nidiḥ*), met. rel. to **e: ArabSyr *duḥan***. ◇ **a: Tuar *a-hu*** // = **f: Izd *a-ggu*** (Izd -gg- is <**-ww-*; Ahg *ahu* and Izd *aggu* as *a-* is "stable", i.e. not a prefix but part of the root), both <**Hab* or <**Haw* (cf. Ghadames *ubu*); if <**Haw*, perhaps = **a?: Maʔa *(mu)-aʔu***; neither one seems rel. to **a: Eg *ḥty***. ◇ **f?: Beḍ *egâ*** // <**?Vg-*, not rel. to **f: Izd *aggu*** (-gg- <**-ww-*, see above). ◇ **q: Dah *ṭugwgwa*** // acc. to EEN 17 <Khoisan.

79. 'stand' ◇ **b: Akk *nemed-um* ?** // *nēmed-* 'support' (noun), not sc.; *izuzzu* is 'to stand'. ◇ **c: Jib *feśś*** // 'to get up, rise' JJ 17 ('sich erheben, aufstehen' Bit 18), not sc. (therefore, cannot = **c: Dizi *as/aś***); *šor* is 'to stand' (JJ 243; 'stehen' Bit 61), either <**šbr* (trans. *ešbér*), or <**šwr*, in which case = **j: Hs *caya*** (*čáyā* CLR II) <**čar-* (cf. Kirfi *coriyo*, Siri *cerro*, Miya *šar* id.). ◇ **g: Izd *kker*** // 'rise, sprout' (not sc.); in any case, not = **g: Mkk *ṭòʔira*, Tum *wóoriwóori*** < AA **?Vwir-* = Had *uull* <**?urr-* (cf. HEC; not in Fl giving **r: Had *kiʔ*** 'get up', not sc.), Sidamo *uurr-*, Janjero *yerōwa* (met.). ◇ **s: Gwt *sikkar*** // nth. in com. w. **s: Arb *ēld/ell*** (*?el-d-*); a slip? ◇ **r?: Yaaku *ḡah*** // 'get up', not sc. (no word for 'stand' in Hei Ya). ◇ **t: Dah *saad*** // probably a lw. from a Konsoid language (cf. Dirayta *soh-aḍ-*). ◇ **e?: Maʔa *huma*** // *-ʔuma* HRSC 388, nth. in com. w. **e: ArabSyr *qaf*** (a slip?). ◇ **u: Ong *yaw*** // <**yaw(?)* = **h: Dime *wuy*, Hamar *weey-u*** (cf. Ari *wóʔ-* etc. Bnd Om 217) <**wVyʔ-*, likely = **z: Chara *yeʔ*** (acc. to Fl, <**yeʔ* which needs arguments), rather <**yeʔ-* (cf. Zayse Zergula *eʔa*, Gidicho Koyra *ēʔ* id).

80. 'star' \diamond **d?**: **Tuar a-tri** // \langle *tari (rel. to Chad *tir- 'moon': Jegu *tere*, Mkk *térè*, Bolewa *terε*, Mnd *tré*, etc.), prob. to sc. with **h**: **Mnd tre-yokwa**; neither = **d?**: **Siwa iri** (rel. to AA **iwVr*- 'moon': Jib *ʔerət*, Ahg *eôr*, NOmot: Anfillo *wəro*, etc.), nor **d?**: **Hs tawrārō**, also *təmrarō* (AbrHs 848) \langle *ta-mrar-, possibly \langle *-mVlal- (neither rel. to Siwa), in which case rel. to **e**: **Mkk mooli-so** (also Angas *mal-m*, etc.). \diamond **j**: **Or urži?** // \langle *wVrg- or *Hurg-, not = **j**: **Beḍ hayuk**, **Arb húzzuk**, **Gwt híske**, **Yaaku hinso?** \langle *hi(n)3-uk- (cf. PEC 35, 36). \diamond **l**: **Aun biwa** // not = **l?**: **Dizi bíiz**, **Dime bez** (*-z > Aun s, not w or 0). \diamond **k**: **Dah íngilife** // a conspicuous Khoisan lw. with a "click", not sc.

81. 'stone' \diamond **a**: **Eg ín**, **Copt ʔoone-** // (Bohairic *ʔōni*), very likely \langle *ʔVnil-, met. rel. to **y**: **Dizi nyalu** and **Dime laalo** (assim. \langle *naal, cf. also Bencho *nivēl*, Nao *nvelu*). \diamond **d**: **Amh dəngay** // \langle Or or Agaw (cf. Bil *dāngwəra*). \diamond **Izd h**: **i-selli**, **i: t-aggun-t** // both mean 'big stone', not sc.; *azru* is 'stone'. \diamond **n**: **Beḍ ʔawê** // \langle *ʔab- (cf. Khmt *aba*, Khamir *ʔabə*, Bil *ambá*, Maʔa met. *bwʔao* 'mountain') = **b**: **Akk abnu** (\langle *ʔabn- \langle AA *ʔab-n-). \diamond **r**: **Had kina** // likely \langle *kirn- (with a full assim. of *-r-) = **o**: **Bil kriḡ**, **Khmt kerná**, **Aun karn** (*kárón*). \diamond **w**: **Iraqw çafanu**, **Ong çafa** // rather than not rel. to **x**: **Mao sówé** (and Janjero *šuʔā*, Qwadza *çáʔ-iko* id., all \langle AA *çaf-), but not to **x**: **Shin šusa** [Fl], *šucca* [Lmb Sh], *šuca* [Bnd Om 175] \langle *šut- [ibid.], **Chara šuča**, **Male šučí**, all \langle N. Omot *šut/ʔ-.

82. 'sun' \diamond **a**: **Copt re/le** // Boheiric *rē*, Sahidic *re*, Fayumic *le* continuing Eg *rē*, more likely \langle *lVʔ = **a?**: **Iraqw loʔa** \langle *loʔ- (counter to HRSC 34, but cf. ibid. 141; rel. to E. Cu *leʔ- 'moon' PEC, Afar *laʔó* 'day', all \langle AA *lVʔ- 'luminary, light', cf. also Sem: Arab *laʔlaʔ*- 'mirage in the afternoon heat' and W. Ch: Daffa-Butura *le?* 'to break (of day)'); hardly = **a?**: **Hs rana** (rel. to Daffo-Butura *reén* '(mid)day'; in view of no other matches in AA prob. a lw. \langle NS, e.g. Dagu of Darfur *uroḡei*). \diamond **i**: **Beḍ yin** // a lw. \langle Kordofanian *nei/ini cannot be excluded.

83. 'swim' \diamond **a?**: **Jib reh** \langle *rbeḡ // not = **a**: **Eg nby** (\langle *nby or *lby), **Copt neʔēbe**. \diamond **s**: **Male çub-e** // a lw. (not sc.) \langle Amh *šābb-ātā*, borrowed, in its turn, \langle Geʔez *šabata*, *šabaya* (LGz 547); *wayz* is the inherited term in Male (Bnd Om 62), likely rel. to **m**: **Arb zawaḡaḡ** (*zawaḡ-aḡ* Hay Arb) \langle *3/žawaḡ- (contra Sas Brj 52, where Arb *zaw-* \langle *zak-; *-k > 0 or -ḡ in Arbore is unusual; cf. also Burji *dah-aḡ-* \langle *3/žah-, contra Sas Brj 52 \langle *zak-), probably = **p**: **Iraqw yaʔe warḡēma** (*warḡem-* Bla Ir; comp. ibid. to Alagwa *darḡasu* 'fish') \langle

wadah-* <*(wa)з/žah-? ◇ **c: Ong *šap* // not = **c:** ArabSyr *sabah*, but very likely = **e:** Siwa *siyâf*, Izd *ššef*.

84. 'tail' ◇ **c?:** Amh *čəra* // lw. < Cu or, less likely, Omot (v. below). ◇ **c:** Khmt *čerá* = **m:** Bil *šemar*, Aun *cəmar* (<*čimar-, met. <*čir-am-), Had *šerimo* (<*čir-im-, cf. Sidamo *čira*) = **c?:** Chara *šeera* (Kafa *čērō*), Dizi *čəru* (*čiru* Bla Om), all <AA *čihr- (> Sem *tVhr- 'back'). ◇ **d:** Tuar *emellaur*, *aryal* // *e-mallawɣ* (*y* is mistaken for *r*; <*mV-lawk) and *a-rǧal* (*ǧ* is mistaken for *y*; <*raǧl) are two different roots. ◇ **lw.:** Siwa *a-mabus* // *a-ma-ǧbūs* Lao; *ǧ* usually implies an Arabism, but there seems to be no source word in Arab. ◇ **h:** Kiir *kâr* // *kâr* <*kitr- (cf. Tala *kítar*, etc.) = **j:** Mnd *uktere*. ◇ **lw.:** Hamar *dubânâ* // *gul-i* is an inherited term = **u:** Dime *golan* (also Ari *gooli* Bnd Ar).

85. 'that' ◇ **a/b:** Beḏ *be-m/be-t* // *be-* is the deictic component, not = **a/b:** Eg *pf*; /*pfy/tf/nf* (pl.), where *f* is the deictic component.

86. 'this' ◇ **a/b:** Copt *pai/tai/nai* (pl) // *ai* is the deictic component (<?*ay), not = **a/b:** Eg *pn/pʔ y/tn/nn* (pl.), where *n* is the deictic component in most forms; Eg *-n* = **d:** Akk *ann-iyum*, the correct form being *anniw* <*ha-nn-*iw* (**c:** Šina adduced by Fl is 'those'), with *-n-* as the deictic component pointing to a close object (cf. *ulliw* 'that') = the *n* component in **e:** Jib *denu* <*dV-nu, **h/b:** Siwa *wan/tan*, **d:** Kiir *nani*, **h:** *nnan*, **a:** Mnd (*bo*)-*na*, **k:** Gis *hana* <*ha-na*, **h/b:** Beḏ *un/t-un*, **d:** Bil *niin*, **h:** Khmt *yen, en*, **d:** Aun *ni*, **l/b:** Or *kana/tana* <*na, **d:** Ong *finda* <?in-da, **d:** Mao *na*, **k:** Shin *han* <*ha-n*, **o/c:** Dizi *eṅke/yēṅk* <*n-k-. ◇ **f:** Amh *yih* <*zik // < *yi-h (cf. Harari *yī?*) = **h:** Tuar *wah* (<*wa-h*) and is rather rel. to the *h* component in **g/c:** ArabSyr *hāda/hādi* (<*ha-dā), **k:** Gis *hana* (<*ha-na*), Shin *han* (<*ha-n*), Chara *hāna/hari* <*hā-*, **n/f:** Male *hay/hana* < *ha-*. ◇ **e:** Jib *izenu* (pl) // *izēnu* is the correct form (JJ 2) <?*ila-nu (*elyénu* 'diese' Bit 9), likely = **m, b:** Arb *hálo/tálo* <*h/t-*alo*, *-alo* being the deictic component.

87. 'thou' ◇ **a:** Eg *nt-k*, Copt *ntok* (both <*nV-tV-k), Akk *atta/atti* (<?*a-n-t-), Amh *antā*, ArabSyr *int*, Bil *inti* = **b:** Izd *kun* (<*ku-n), Mkk *keṅ/kon* (<*kV-n), Iraqw *kuṅ/kiṅ* (<*ku/i-n-) = **e:** Aun *yēna* (*ónt* Appl IC <?*V-n-t), Male *nēni*; all rel. by the common deictic component **n*. ◇ **a:** Jib *het* / *hit* // <*hi(-t), cf. Mehri *hit*, Soqotri *ʔê* (m.), *ʔî* (f.), rather not = **a:** Akk *atta/atti*, Amh *ʔantā*, etc.; the latter ones hardly = **a:** Maʔa *ari*, as *-r-* <*t- in Maʔa needs proof.

88. 'tongue' \diamond **c:** **Tum duž** // < **du-ls-* (cf. Somray *dì-lèsè*) < **tu-lis-* = **a:** **Akk lišān-** and the rel. forms. \diamond **e:** **Mnd aara, Gis žirne** // Mnd also *nàrà* CLR II (< **ʔa/irn-* ~ **nar-*), all < **ʔVrn-* ~ **ʔVnr-* = **j:** **Dah fééna**, likely < **ʔarn-* = **i:** **Or arraba, Arb žérréb, Had állaaba, Gwt arrap(-ko), Yaaku êrê ~ êrêp** (*εrep-a* is pl. Hei Ya) < **ʔarr-ab-* (cf. Dasenech *žere*, pl. *žerb-u*, see PEC 23; cf. also Omot: Shabo *εrib*), likely rel. to **m:** **Shin albéra**, met. < **ʔalrab-*, assim. < **ʔanrab-*, and **n:** **Dizi žéabíl**, met. < **ʔalb-* (cf. Nao *yalb*) < **ʔar(n)b-*; all < **ʔarn-ab-* ~ **ʔanr-ab-* (cf. Saho *anráb*), with *-b* of obscure origin (a fossilized suffix? See next). \diamond **f:** **Beđ mida(-b)** // also *midála* RBeđ, *mídálāb* Bnd LE < **midal(-ab)-* (*-b* may be an objective case suffix or a fossilized suffix) < **mi-ʔi(n)d-al(-ab)-* (cf. Qwadza *ondalimo* id. < **ʔand-al-*) = **j:** **Maža žanda** (*lužanda* HRSC 387), **Ong žadaba** (unless a lw. < Hamar), **Dime idim, Hamar atáp** (also *adəb*, v. Bnd Om 218), all likely < **ʔand(-al/ab)-*; on the present level of the AA reconstruction rather to be separated from **ʔanr-ab-* ~ **ʔarn-ab-* (above), though eventual cognation cannot be ruled out.

89. 'tooth' \diamond **d:** **Izd tu-yməs-t** // nth in com. w. **d:** **Amh tərs** (a slip?). \diamond **f:** **Maža iki** // *ižike* < **ʔik-* (cf. Burunge *ike*, Afar *ikó*), hardly = **f:** **Or ilkān** (< **ʔilk-*), **Arb ilig** (< **ʔilg-*), **Gwt ilge** (*ilqe* AMS; < **ʔilk-*), all < AA **ʔilg/k/ḱ-*, with irregular variations of the third radical (anyway, **l-*, even in the *-l-* plus velar cluster, is not expected to fall in Maža, Burunge and Afar), not rel. to (prob. contaminated with) **f:** **Had inkē** < **Hink-* (irregular vs. Sidamo *hinko* < **hink-*, both irregular vs. Gollango *ʔanko* 'molar'), **Yaaku inj'e-ni** (*inž'e-ni*; may be < **ʔiŋg-* < **ʔink-*), in its tur not rel. to **f:** **Bil eruk** (*erúk* R Bil), **Khmt iruq** (*arəḱ^w* Appl Khm), **Aun irukwi** (Damot *erqwi*) < Agaw **ʔiruk/ḱ^w-*. \diamond **h:** **Iraqw sihino** // likely met. < **sin-ḥ-* (with the fossilized **ḥ* body-part marker?) = **b:** **Akk šinn-** and the rel. forms < AA **sin-*.

90. 'tree' \diamond **e:** **Amh zaf** // lw. < Agaw, not sc. \diamond **h:** **Siwa aži bayra** // not in my sources; Lao gives *tissəžrat* < Arab. \diamond **k:** **Mkk žundumú** // pl. *žindá* < **Hind-* = **q:** **Beđ hindi**. \diamond **t:** **Gwt gargo** // *karkó* AMS < **gar-* (Tsamai *gar-ko*); if the transcription in AMS, not in Fl, is correct, not = **t:** **Arb ḱoro** (< **ḱor-* PEC 48), **Dah ḱoro**. \diamond **q:** **Ong hanča, iinsé, Mao incá, Dizi inč** // also *inč* (Bnd Om 219) < **Hinč-* (cf. Gimirra-She *inč, enč* Bnd Om 176, likely = **b:** **Akk išu** < **ʔiṣ-* < AA **ʔiḱ-*; neither = **q:** **Beđ hindi**, nor = **q:** **Shin mita, Chara mica, Male mici** < **mi(n)t-* (cf. Kafa *miṭō*, Zayse *minča*, etc.) < AA **mayt-* (not rel. to **q:** **Beđ hindi** either): Sem **mVyṭ-* 'branch, rod, stick', Eg *mdw* 'stick, staff', E. Cu **mayt-* 'palm-tree' (Or *meeti*, Burji *mayče*, Dasenech *meeti*), C. Ch **mVṭ-* 'baobab'.

91. 'two' ◇ **d**: **Kiir** *rāp* // lw. < Bantu (e.g. Jarawan *rwap*) CLR I 171; not sc. ◇ **e**: **Hs** *biyyu*, **Mnd** *bua* // <*bir- or *bil-, presumably lws. < Benue-Congo CLR I 171; not sc. ◇ **lw**: **Ong** *lama* // not necessarily a lw. (< Hamar < Or?); present in both Omot branches, cf. **SOMot**: Hamer *lama* and **NOMot**: Male *lam?o*, Koyra *lam?e* (comp. in Bla Ong Appendix), likely rel. to **h**: **Mao** *lumbo* (to distinguish from **h**: **Chara** *nanta* <*nam-t- = Janjero *namma*, etc.; cf. Afar *namāyā* vs. Saho *lammā*, Dasenech *nama* vs. Arb *lamma*).

92. 'walk' ◇ **Copt** **a**: *mōšē*, **d**: *bōk* // *bōk* is 'go, leave' (not sc. for 'walk, go'). ◇ **i**: **Siwa** *ḥ* // not in my sources; anyway, *ḥ* implies a lw. < Arab; *ukal* is 'walk' (met. rel. to **b**: **Akk** *alāku* <*hlk ?). ◇ **Izd** **j**: *ddu*, **k**: *sara* // *sara* 'se promener' (not sc.: I hold French 'aller, marcher' better renders what Swadesh meant by 'walk'). ◇ **k**: **Mkk** *sōr* // *sōr/šōzírē* 'se promener' JMkk (not sc.); *šídó* is 'to go' = **j**: **Izd** *ddu* <*Hiddaw (cf. Zenaga *edda*, Senhaja *addu*, etc.). ◇ **u?**: **Male** *ad/aad* // rather *aaḍ*- than *ad*- (v. Bnd Om 58); in any case, the latter neither = **u?**: **Gwt** *ačč* (also *ašš* AMS 244) <*ʔas/č-, nor **u**: **Arb** *ʔiʔit* <*ʔit- (the Gwt and Arb terms are hardly rel. to each other either). ◇ @: **Mao** *hoy?* // likely = Iraqw *hiʔiit* (not in Fl); it is difficult to say whether such phonetically poorly preserved roots as **z**: **Hamar** *yí* and **g?**: **Tum** *á* (acc. to Fl, <*ar, but rather <*ha, cf. Somrai *há*) may be related.

93. 'warm' ◇ **Akk** **c**: *baḥīr-*, **d**: *ḥumṭ-* // *baḥr-* (not *baḥīr-*) is 'hot', *ḥumṭ-* is 'heat, fever' (not sc.); in any case, not = **d**: **ArabSyr** *ḥmu* which, on the contrary, = **Akk** *emm-* 'warm, hot' (not in Fl) <*ḥmm, but neither = **d**: **Jib** *hub* (having not a single radical common with **d**: **ArabSyr** *ḥmu* and meaning 'warmth, heat', not sc.), nor = **d**: **Izd** *ḥmu* as the latter is an obvious lw. < Arab. ◇ **e**: **Jib** *gēll* // vb.; *šḥán-un* is an adj. 'warm' JJ 264. ◇ **?**: **Mkk** // *wèʔini* JMkk 194 = **l**: **Tum** *wây*. ◇ **h?**: **Hs** *zāfi* // *zāfī*, not = **h**: **ArabSyr** *dafi*, as *d cannot yield z in Hs. ◇ **n**: **Mnd** *ombra* // <*ʔa-(m)bVr-, likely = **q**: **Bil** *bir*, **Khmt** *béro* (*báru* vb. Appl Khm). ◇ **x**: **Dah** *búgubúgu* // lw., v. EEN 44.

94. 'water' ◇ **d**: **Mkk** *ʔàʔú* // not = **d**: **Bil** *aqu*, **Khmt** *āqw* <*ʔaḳw. ◇ **c**: **Mnd** *yowe*, **Gis** *yam*, **Beḍ** *yam* // <*yam- (= Sem *yamm- 'sea'; the Mnd form is problematic), rather not = **c**: **Tuar**, **Siwa**, **Izd** *ama-n* (pl.) <*Ham-an; the latter = another Ch root, *ham- (E.: Migama *àmmi*, Mubi *ʔàm*, C.: Kotoko *ʔàm*, W.: Tal *hàm*, Fyer *ham*, etc.). ◇ **e**: **Or** *bisāni*, **Arb** *bíyče* // <*bič- or *bik-; acc. to PEC 15, <*bik-ee; a debatable case, probably two different roots, cf. Somali *biyo*, Rend *bič'e*, Boni *biy'o* <*SAM *biče(o) Hei SAM 54, Baiso *bek-e*,

component rel. to **b**: Copt *nīm* = **a**: Akk *mannu*, Jib *mun*, Amh *man*, ArabSyr *mīn* (<Sem **mV-n*).

99. 'woman' ◇ **k**: Kiir *namaàsi* // rather lw. < Hs *namiži*. ◇ **x**: Mnd *moksa* // *muskə*, *múksé* CLR II 347 (<**mV-gsa*) = **l**: Gis *ngos* (<**mV-gos-*). ◇ **g?**: Had *meentičo* // <**man-t-it-* <**man(-t)-* 'man', not = **g**: Tuar *t-aməṭ* (Ahg *t-a-məṭ* with "unstable" *a-*), **Izd** *t-a-məṭṭ-ut* (**t* > Had *t*, not *t*) and not = **g?**: Iraqw *amēni* (*ʕameeni* [Tos Irq]); the Iraqw and Brb forms are not rel. either. ◇ **j**: Tum *deem* // probably <**tām-* (cf. Lele *tāmá*), less likely <**dVm-* (even in this case not = **j?**: Yaaku *damatu* or, acc. to Hei Ya, *damat'ú* <**ṭam-at-* as **t*- > Tum *t*, not *d*). ◇ **r**: Dah *naṭa* // = **o**: Or *niiti?* <**niḏḏ-* <**niṭṭ-* (cf. Wallaga dial. *naddēn*, pl. *nadd*); a lw. into Dah from Or cannot be ruled out. ◇ **g?**: Chara *mašna* // <**mas-n-*, hardly = **g?**: Had *meentičo* <**man-t-it-* (see above) and certainly not = **g**: Tuar *t-aməṭ* (Chara -š is unlikely <**t* and not <**t*), but rel. to **g?**: Shin *maása*, if the notation in Fl is correct; if it is *maacá* as in LambSh 360, the latter may originate <**ma-t-* = **g?**: Hamar *maa* <AA **ma?*- 'mother, woman' (cf. also Beḏ *ma?* 'women'); if Shin is *maaça* as in Bnd Om 178, = **g**: Tuar *t-aməṭ*, **Izd** *t-a-məṭṭ-ut* and **g**: Hs *máčè* (also *màtá* <**mat-*, likely <**maṭ-*). ◇ **u**: Male *lali* // a reduplicated stem, probably = **h**: Siwa *ta-lti* <**ta-lali-t* (Ghadames *ta-lta* and *a-le-t*). ◇ **g?**: Dime *ʔamze* // dissim. <**ʔanʒ/ž-*, cf. Ari Hamar *anz-a* 'girl' Bnd Ar 151; not = any term sc. "g" (see above).

100. 'yellow' ◇ **a**: Eg *aat ?* // unusable transliteration; no term for 'yellow' in available sources. ◇ **?**: Akk // *warḵ-* is 'yellow, green' = **f**: Tuar and **Izd** *a-wray* (<**warḵ*). ◇ **g**: Mkk *gurus* // *gúrùs* 'argent (monnaie)' JMkk 108; *bólilé* is 'yellow' *ibid.* 73. ◇ **?**: Mnd // *ḏùvòṅè* <**dublf-Vn-*. ◇ **h?**: Beḏ *ádâr* // *ádar/lo* 'red' (RBeḏ); *ásfar* (*ibid.*) and *kwikumi* (Bl Ms after Thelwall) are 'yellow', but both are Arabisms (not sc.) ◇ **k**: Bil *kadaray* // a lw. < Tigre *kädära* <Arab (cf. LGz 15); not sc. ◇ **n**: Arb *liywan-ḏa* // possibly <**liṣw-an-*, met. rel. to **p**: Gwt *ʕawlette* <**ʕawl-* 'yellow, brown' PEC 46. ◇ Dah **q**: *randzi-nuni* // *raanži* 'paint' < Bantu, acc. to EEN 41 (not in Tos Dah).

IV

Cognates in selected individual languages

"Having gotten 1% or 0% or 0.9% or 1.8% and such like between the extremes of Afrasian, I bore the general conclusion of 'zero to one percent'...As I said several

times in Santa Fé, proto-Afrasian is at least 20,000 years old and by one reckoning 30,000 years old."

a) Forms in Male versus non-Omot AA (excluding Ong) given in H. Fleming's 100-word lists and scored as cognates by the author
(Fleming's scores are marked by **a**, **n**, **x?**, etc.)

'bone': **g**: Male *migu-ci* = **g**: Had *mikē*, Gwt *miġġe* (< Cu-Omot **miḱ-*, cf. Sidamo *miḱ-iččo*, Tsamay *meq'-te*, Shin *máḱə-sa*, Wolaita *meḱe-tta*).

'breast': **e?**: Male *dan-ci* = **e?**: Arb *eduma-n*, Gwt *faḍun-ko*, Yaaku *édúm-ín* (< Cu-Omot **ʕaṭum-*; cf. Chara *ḍama*, Dizi *ṭiam-u*).

'claw': **t**: Male *čungo* = **l**: Khmt *hičela* (<**ḱičel-*), presumably = **p**: Had *turaŋka* = **r**: Yaaku *segil* = **j**: Gis *dlelek*, *želek*, *ženek* (< AA **šunḱ-al-*).

'cloud': **w**: Male *sāri* = **r**: Maʔa *hlari*, *išare* HRSC 387 (< Cu-Omot **čar-* or **šar-*, cf. Beḍ *šāy*, Elmolo *sér* and Rendille *seréy* 'sky', Janjero *šāru* 'cloud', etc.; cf. Bla Omot No. 14.1.).

'come': **a**: Male *yê?* = **a**: Eg *iy*, *iw*, Copt *ʔii*, Tuar *ayu* (*é*o, imp.), Beḍ *ʔi* (also *yi?*), Ong *ʔē*.

'dog': **l**: Male *kana* = **i**: Yaaku *kohen* (< AA **kʷahn-*).

'drink': **n**: Male *uške* (<**ʔus-k-*, cf. Mao *iš*, Shin *uša*, Chara *uš*, etc.), very likely = **a**: Tuar *əsu*, Siwa *su*, Izd *su*, Tum *hè* < **sè*, Kiir *se*, Hs *šá*, Mnd *še*, Gis *še* (< AA **ʔus-* ~ **ʔisaw-*).

'ear': **q**: Male *wôyzi* (also Shin *wááza*, etc.) = **a**: Akk *uznu*, Jib *ʔidən*, ArabSyr *udn* (< AA **wayṣ-* ~ **ʔi/uṣ-n-*).

'eat': **o**: Male *mu?*, very likely = Beḍ *ʔām* (not in Fl), **j**: Arb *ʔôhôm* (*ʔôhôm*), Mkk *ʔômi* = **a**: Tum *wâm* (< AA **mVʔ-* ~ **ʔam-*).

'egg': **p**: Male *hûla* = **p**: Yaaku *ḥolḥol*, Akk *pelû* (< AA **ḥul-* ~ **ḥVlʔw/y-*, cf. Wolaita *ḥuḥul-iya*, Hamar *ḥûla*).

'fly': **t**: Male *baran*, = **t**: Amh *bärrärä*, Beḍ *birʔik* (<**bir-ik?*), Khmt *bir*, Aun *berer-əḥ*, Or *barr-is*, Had *barar* (< AA **br(r)-*).

'give': **q**: Male *îng* (<**ʔiŋ* <**ʔim* = **q**: Shin *im*, Dime *ʔim*, etc.) = **a**: Eg (imp.) *imy* (< AA **ʔim-*).

'good': **y**: Male *koši* = **y**: Maʔa *kusa*, *kušó* Bla Omot No. 34.3 (< Cu-Omot **kuS-*).

'heart': **l**: Male *saaza* = **l**: Arb *zazzá* = **n**: Gwt *safa-ko* <**ʔaḱ-* (cf. Tsamai *záḱ-kó*) < Cu-Omot **ʔaḱ(ʔaḱ)-*.

'I': **f**: Male *tani* <**ta-ʔa-ni* (cf. Shin, Chara *taani*) by its *-n-* component rel. to **a**: Beḍ *ane*, Bil *an*, Khmt *ān*, Aun *an*, Or *ani*, Had *ani*, Gwt *ano*, Dah *ana/añi*, Maʔa *ani*, Iraqw *an/ani*, Eg. *in-k*, Copt *anok*, Akk *anā-ku*, Amh

ani, ArabSyr *ana*, Tuar *nek*, Siwa *niš* (<*ni-k), Izd *nekk*, Mkk *nu-ŋ/nūno*, Tumat *nâ*, Hs *nī/nā*.

'know': **b: Male** *er* = **b: Bil** *ar?*, Gwt *ar*, likely = **l: Had** *la?*- <*ra?/?- (< Cu-Omot *ʔar- ~ *ra?/-).

'liver': **p: Male** *mayzi* = **a: Eg** *mʔst* (wrong transliteration: *mʔz-t* and *myz-t* are correct).

'meat': **j: Male** *aški* (<*ʔač-ki) = **j: Khmt** *siyya*, Aun *iši* = **e: Or** *fōni* <*soʔ-n- (*f* < *s in Or points to AA *č), Arb *soʔ*, Gis *ʔiše* (< AA *čVʔw- ~ *ʔačw-).

'name': **b: Male** *sûn-ci* (<*sum-t-) = **b: Akk** *šumu*, Jib *šum*, Amh *səm*, ArabSyr *ism*, Tuar *i-səm*, Izd *i-səm*, Mkk *suma*, Tum *him*, Kiir (*wu*-) *sum*, Hs *suunaa*, Gis *šim(-ed)*, Beḏ *səm*, Bil *siŋ* (*šij*), Had *summa* < AA *(ʔi-)su/im-.

'neck': **z: Male** *korčo* (very probably assim. <*gVrʔ-), prob. = **j: Izd** *a-gerd*.

'nose': **f: Male** *siidi* (cf. Shin *šinṭa*, Dizi *sin* ~ *siŋ*), perhaps = **f: Khmr** *əsəŋ*, Aun *əssán*, Or *fúnnaa-n*, Arb *sōnó*, Had *sáne*, (?) Gwt *sinde* (acc. to Fl, rel. to Omot; acc. to Bla Omot No. 61.1., borrowed <NOmot, which seems more plausible), Dah *sína*, Tum *hun* (<*sun), Kiir (*i*) *sâ* (*nyisən*).

'rain': **i: Male** *irzi* (<*ʔir-zi?), perhaps = **i: Aun** *ri/əri* (*óri*), Arb *ʔiriy*, Gwt *irrawo*, Maʔa *re* = **g: Hs** *ruwa-n-samā* (*rúwā* 'water; rain') < AA *ʔi-ra/iw-.

'red': **y: Male** *zoke* (cf. Oyda *zoḳo*, Bencho *zōḳə*), undoubtedly = **f: Tuar** *ihaggayen* (<*-hawway- <*zawwaḳ) = **g: Siwa** *a-zəggəy* (<*-zVwwaḳ), Izd *azuggway* (< AA *ʔ/ʒawḳ-).

'road': **z: Male** *goyci* < *g^(w)Vy-t- = Bil *gūg* (not in Fl) = **o: Khmt** *gug*, Had *goga* < AA *g^(w)Vy(-t)- ~ *g^(w)Vyg^(w)Vy- (cf. also WChad: Bolewa *goggo*, etc.).

'say': **u: Male** *gε?* (Dizi redupl. *gεg*, Dime *gēmu* <*gayH-m-, Hamar *gi*) = **q: Yaaku** *oh/ok* (*okhoi* Bla Ms), likely < *ʔoghoy (also Tsamai *gəhə* id.) < Cu-Omot *gayh-.

'sleep': **h: Male** *gîn?* = **h: Bil** *gan-y*, Izd *gen* < AA *gin(?)-.

'small': **m?: Male** *ḏaka* = **m? Or** *diḳka?* = **m: Mnd** *čiko* (<*tik-<*tiḳ-, assim. <*diḳ), likely = **n: Gis** *mečidek* (<*mV-ṭiṭik- <*tiḳtiḳ-, assim. <*diḳdiḳ-) < AA *di/ak-.

'sun': **k: Male** *abi* = **k: Aun** *awa*.

'that': **x: Male** *sék* (<*sV-k, cf. Shin *ěkê*, Dizi *yêk* id.), rel. by its *sV*-component to **p: Or** *sunī* (<*su-ni, cf. Konso *se*, Elm *asu* id.) and to **s: Yaaku**

se/saʔa; rel. by its *-k* component to **c**: Jib *dǝkun*, **g**: Siwa *dawok* (m.), *tatok* (f.).

'this': **n/f**: Male *hay/hana*, rel. by its *h-* component to **g/c**: ArabSyr *hāda/hādi* (<**ha-da*) = **f**: Amh *yih* (<**yi-h*), perhaps = **h**: Tuar *wah* (<*wa-h*) = **k**: Gis *hana* (<*ha-na*).

'thou': **e**: Male *nêni* = **e**: Aun *yêna* = the *n* component in **a**: Bil *inti*, Eg *nt-k*, Copt *ntok* (both <**nV-tV-k*), Akk *atta/atti* (<**?a-n-t-*), Amh *antā*, ArabSyr *int*, **b**: Izd *kun* (<**ku-n*), Mkk *keṇ/koṇ* (<**kV-n*), Iraqw *kuṇ/kiṇ* (<**ku/i-n*).

'two': **h**: Male *lamʔo* = **h**: Bil *laṇa*, Khmt *liṇa*, Aun *laṇa*, Or *lama*, Arb *lamma*, Had *lamo*, Dah *líma*.

'we': **a**: Male *nuni* = **a**: Bed *henên* (*hanín*), Bil *yin*, Khmt *yīn*, Aun *no-ži* (*ənnó-ži* Hetz), Or *nuu*, Arb *ʔonó-(lo)*, Had *nēs* (<**nV-s*), Gwt *íne*, Yaaku *nīniʔ*, Dah *nāni*, Maʔa *nine*, Eg *inn*, Copt *anon*, Akk *nīnu* (<**na-ḥ-n-*), Jib *nḥan*, Amh *əñña*, ArabSyr *niḥna*, Tuar *nəkkən-ıd*, Siwa *nčini*, Izd *nukni* = the *n* component in **b**: Mkk *kineṇ/kayeṇ*, **c**: Tum *na*, and **f**: Iraqw *atēn*.

'white': **m?**: Male *bore* = **m**: Gis *babaraṇ* <**ba(r)bar-* (cf. Mofu *mǝbàrá*, Lele *bòré*, etc.).

'who?': **f**: Male *oni* (<**?a-w-ni*) = **f**: Or *eenu*, *ēññu*, by their *-n-* component rel. to **b**: Copt *nīm*, **a**: Akk *mannu*, Jib *mun*, Amh *man*, ArabSyr *mīn* (all four < Sem **mV-n*).

'woman': **u**: Male *lali* = **h**: Siwa *ta-lti* (<**ta-la-t-*, cf. Ghadames *ta-lta*, *walet*, *alet*).

b) Forms in Male cognate to non-Omot AA given by the author as additions or corrections/substitutions to Fleming's lists:

'ashes': **u**: Male *bîdîn-c* = Hs *hábdî* <**habd-* or **ha-bdVH-* (Ngizim *bébé*, Yedina *budén*, Mas *búdu* id. CLR 4-5) < AA **bi/ud(-Vn)-*.

'fat': Male *mōr-əsi* (Bnd Om 57 after Siebert; unless a lw. < Or *moora* or Amh *mora*), Aun *mori*, Arb *moora* = **b**: Hs *may* (*mài* 'oil, fat, grease' Abr Hs 638), likely <**mar-* (cf. Sura *nimùùr*, Bata *māré*, Bachama *mare* CLR 132-3).

'green': **y**: Male *karci* (<**kar-t-*, cf. Male *karc*, Chara *karta* 'black') = Hs *kōrè*.

'leaf': Male *ʔilaši* (Bnd Om 59; <**?il-aši* <**ʔil-?* Cf. **q**: Mao *waale* <**waʔal-?*), likely = **p**: Iraqw *loʔo* (met.; cf. also Hebrew *ʔälä* id.) < AA **ʔi/al-*.

'mountain': Male *ḍuka* (Bla Omot) = Tuar *a-dyay* (both < AA **dukaḵ-*).

'name': **lw: Aun səm** // *šunji* [Appl IC], hardly to score differently from other Agaw (scored **b** in Fl); prob. = Yaaku *ĩši* Bla Lists (unless a loan <Ma'a).

'night': Male *wānte* (Chara *únta*) = **q: Gwt awne, Yaaku awn** (unless < Dullay) < Cu-Omot **ʔa-wan-*.

'not' (omitted in Fl): Male *pətetaʔo*, by its *-t-* component rel. to Maʔa *tu*.

'skin': Male *ʔilʔi* (also *ilzi* Bnd Om 62), likely = Eg *ĩnm*, Copt *ʔanom* (not in Fl) = **a: Tuar ālām, Siwa ilām** < AA **ʔilam-*.

'small': **m?: Male daka** = Akk *daḫḫ-*.

'stand': **r?: Male ek** (Wolayta *ʔek-*, etc.) met. rel. to Arb *keʔ* (not in Fl; cf. Burji *ka-aḏ-*, Dasenech *ḡeé*) < Cu-Omot **keʔ-* ~ **ʔek-*.

'swim': Male *wayz* (Bnd Om 62), likely = **m: Arb zawahad** (*zawah-ad* Hay Arb), poss. = Iraqw *warahem-* (<**wadah-* < Cu-Omot **wayz/ʔVh-* ~ **ʔzawah-ʔ*).

'that': **x: Male sék** (<**sV-k*), rel. by its *-k* component to Maʔa *ká* [Mous 191].

'tooth': **j: Male āči** (also *ʔači*, cf. Doko *hāčče*, etc. Bnd Om 63; = Aroid **ač-i* ibid. 219) = Eg OK *nḥʒ-t* <**nV-ḥVč-* (not in Fl) < AA **ḥač-* (> WCh **ḥācwV* 'teeth' Stolb; Sem. **ḥVt-* 'arrow').

c) Male items cognate to non-Omot AA and their number, according to Fleming (Fl) and the author (Mil)

(The first figure shows the number of those 100-word items where both languages have non-borrowed matches; matches treated by Fl or Mil as cognates are marked by "+", as non-cognate, by "-", absent in Fl and given by Mil, by "0"; debatable cases are marked as "deb".)

Male-Beḏ (95; Fl 5 = 5.3%, Mil 7 = 7.4%): 'come' (Fl+, Mil+), 'eat' (Fl 0, Mil+), 'fly' (Fl+, Mil+), 'I' (Fl-, Mil+), 'name' (Fl+, Mil+), 'we' (Fl+, Mil+), 'what?' (Fl+, Mil+).

Male-Bil (93; Fl 5 = 5.4%, Mil 6 & 1 deb = 7.1%): 'I' (Fl-, Mil+), 'know' (Fl+, Mil+), 'name' (Fl+, Mil+), 'road' (Fl 0, Mil+), 'sleep' (Fl+, Mil+), 'thou' (Fl-, Mil+ deb), 'two' (Fl+, Mil+), 'we' (Fl+, Mil+).

Male-Khmt (86; Fl 5 = 5.8%, Mil 6 & 2 deb = 8%): 'claw' (Fl-, Mil+ deb), 'fly' (Fl+, Mil+), 'I' (Fl-, Mil+), 'meat' (Fl+, Mil+), 'nose' (Fl+, Mil+ deb), 'road' (Fl-, Mil+), 'two' (Fl+, Mil+), 'we' (Fl+, Mil+).

Male-Aun (91; Fl 8 = 8.8%, Mil 9 & 1 deb = 10.4%): 'fly' (Fl+, Mil+), 'I' (Fl-, Mil+), 'meat' (Fl+, Mil+), 'name' (Fl 0, Mil+), 'nose' (Fl+, Mil+ deb), 'rain'

(Fl+, Mil+), 'sun' (Fl+, Mil+), 'thou' (Fl+, Mil+), 'two' (Fl+, Mil+), 'we' (Fl+, Mil+).

Male-Or (96; Fl 5 & 1 deb = 5.8, Mil 7 & 3 deb = 8.8%): 'fat' (Fl 0, Mil+ deb), 'fly' (Fl+, Mil+), 'I' (Fl-, Mil+), 'meat' (Fl-, Mil+ deb), 'nose' (Fl+, Mil+ deb), 'small' (Fl+ deb, Mil+), 'that' (Fl-, Mil+), 'two' (Fl+, Mil+), 'we' (Fl+, Mil+), 'who?' (Fl+, Mil+).

Male-Arb (95; Fl 5 & 1 deb = 5.8%, Mil 7 & 4 deb = 9.5%): 'breast' (Fl+deb, Mil+), 'eat' (Fl-, Mil+ deb), 'fat' (Fl 0, Mil+), 'heart' (Fl+, Mil+), 'meat' (Fl-, Mil+ deb), 'nose' (Fl+, Mil+ deb), 'rain' (Fl+, Mil+), 'stand' (Fl 0, Mil+ deb), 'swim' (Fl 0, Mil+), 'two' (Fl+, Mil+), 'we' (Fl+, Mil+).

Male-Had (97; Fl 6 = 6.2%, Mil 7 & 2 deb = 8.2%): 'bone' (Fl+, Mil+), 'claw' (Fl-, Mil+ deb), 'fly' (Fl+, Mil+), 'I' (Fl-, Mil+), 'name' (Fl+, Mil+), 'nose' (Fl+, Mil+ deb), 'road' (Fl-, Mil+), 'two' (Fl+, Mil+), 'we' (Fl+, Mil+).

Male-Gwt (93; Fl 5 & 1 deb = 5.9%, Mil 8 = 8.6%): 'bone' (Fl+, Mil+), 'breast' (Fl+ deb, Mil+), 'heart' (Fl-, Mil+), 'I' (Fl-, Mil+), 'know' (Fl+, Mil+), 'night' (Fl 0, Mil+), 'nose' (Fl+, Mil 0), 'rain' (Fl+, Mil+), 'we' (Fl+, Mil+).

Male-Yaaku (91; Fl 3 & 1 deb = 3.8%, Mil 6 & 3 deb = 8.2%): 'breast' (Fl+ deb, Mil+), 'claw' (Fl-, Mil+ deb), 'dog' (Fl+, Mil+), 'egg' (Fl+, Mil+), 'name' (Fl-, Mil+ deb), 'night' (Fl 0, Mil+ deb), 'say' (Fl-, Mil+ deb), 'that' (Fl-, Mil+), 'we' (Fl+, Mil+).

Male-Dah (87; Fl 3 = 3.4%, Mil 3 & 1 deb = 4%): 'I' (Fl-, Mil+), 'nose' (Fl+, Mil+ deb), 'two' (Fl+, Mil+), 'we' (Fl+, Mil+).

Male-Maʔa (93; Fl 3 = 3.3%, Mil 7 = 7.5%): 'cloud' (Fl-, Mil+), 'good' (Fl+, Mil+), 'I' (Fl-, Mil+), 'not' (Fl 0, Mil+), 'rain' (Fl+, Mil+), 'that' (Fl 0, Mil+), 'we' (Fl+, Mil+).

Male-Iraqw (97; Fl 0 = 0%, Mil 4 & 1 deb = 4.6%): 'I' (Fl-, Mil+), 'leaf' (Fl 0, Mil+), 'swim' (Fl 0, Mil+ deb), 'thou' (Fl-, Mil+), 'we' (Fl-, Mil+).

Male-Eg (96; Fl 2 = 2.1%, Mil 6 & 2 deb = 7.3%): 'come' (Fl+, Mil+), 'give' (Fl-, Mil+ deb), 'I' (Fl-, Mil+), 'liver' (Fl-, Mil+), 'skin' (Fl 0, Mil+), 'thou' (Fl-, Mil+), 'tooth' (Fl 0, Mil+ deb), 'we' (Fl+, Mil+).

Male-Copt (96; Fl 2 = 2.1%, Mil 6 = 6.2%): 'come' (Fl+, Mil+), 'I' (Fl-, Mil+), 'skin' (Fl-, Mil+), 'thou' (Fl-, Mil+), 'we' (Fl+, Mil+), 'who?' (Fl-, Mil+).

Male-Akk (97; Fl 3 = 3.1%, Mil 8 = 8.2%): 'ear' (Fl-, Mil+), 'egg' (Fl+, Mil+), 'I' (Fl-, Mil+), 'name' (Fl+, Mil+), 'small' (Fl 0, Mil+), 'thou' (Fl-, Mil+), 'we' (Fl+, Mil+), 'who?' (Fl-, Mil+).

Male-Jib (97; Fl 2 = 2.1%, Mil 5 = 5.1%): 'ear' (Fl-, Mil+), 'name' (Fl+, Mil+), 'that' (Fl-, Mil+), 'we' (Fl+, Mil+), 'who?' (Fl-, Mil+).

Male-Amh (83; Fl 4 = 4.8%, Mil 7 = 8.4%): 'fly' (Fl+, Mil+), 'I' (Fl-, Mil+), 'name' (Fl+, Mil+), 'this' (Fl+, Mil+), 'thou' (Fl-, Mil+), 'we' (Fl+, Mil+), 'who?' (Fl-, Mil+).

Male-ArabSyr (98; Fl 2 = 2%, Mil 7 = 7.1%): 'ear' (Fl-, Mil+), 'I' (Fl-, Mil+), 'name' (Fl+, Mil+), 'this' (Fl-, Mil+), 'thou' (Fl-, Mil+), 'we' (Fl+, Mil+), 'who?' (Fl-, Mil+).

Male-Tuar (98; Fl 3 = 3%, Mil 6 & 3 deb = 7.6%): 'come' (Fl+, Mil+), 'drink' (Fl-, Mil+ deb), 'I' (Fl-, Mil+), 'mountain' (Fl 0, Mil+), 'name' (Fl+, Mil+), 'red' (Fl-, Mil+), 'skin' (Fl 0, Mil+ deb), 'this' (Fl-, Mil+ deb), 'we' (Fl+, Mil+).

Male-Siwa (75; Fl 1 = 1.3%, Mil 4 & 2 deb = 6.6%): 'drink' (Fl-, Mil+ deb), 'I' (Fl-, Mil+), 'red' (Fl-, Mil+), 'skin' (Fl 0, Mil+ deb), 'that' (Fl-, Mil+), 'we' (Fl+, Mil+).

Male-Izd (90; Fl 3 = 3.3%, Mil 6 & 2 deb = 7.2%): 'drink' (Fl-, Mil+ deb), 'I' (Fl-, Mil+), 'name' (Fl+, Mil+), 'neck' (Fl-, Mil+ deb), 'red' (Fl-, Mil+), 'sleep' (Fl+, Mil+), 'thou' (Fl-, Mil+), 'we' (Fl+, Mil+).

Male-Mkk (97; Fl 1 = 1%, Mil 4 & 1 deb = 4.6%): 'eat' (Fl-, Mil+ deb), 'I' (Fl-, Mil+), 'name' (Fl+, Mil+), 'thou' (Fl-, Mil+), 'we' (Fl-, Mil+).

Male-Tum (93; Fl 2 = 2.1%, Mil 5 & 2 deb = 6.4%): 'come' (Fl-, Mil+), 'drink' (Fl-, Mil+), 'eat' (Fl-, Mil+ deb), 'I' (Fl-, Mil+), 'name' (Fl+, Mil+), 'nose' (Fl+, Mil+ deb), 'we' (Fl-, Mil+).

Male-Kiir (85; Fl 2 = 2.3%, Mil 2 & 1 deb = 2.9%): 'drink' (Fl-, Mil+), 'name' (Fl+, Mil+), 'nose' (Fl+, Mil+ deb).

Male-Hs (97; Fl 1 = 1%, Mil 5 & 2 deb = 6.2%): 'ashes' (Fl 0, Mil+), 'drink' (Fl-, Mil+), 'fat' (Fl 0, Mil+ deb), 'green' (Fl 0, Mil+), 'I' (Fl-, Mil+), 'name' (Fl+, Mil+), 'rain' (Fl-, Mil+ deb).

Male-Mnd (93; Fl 1 = 1.1%, Mil 4 = 4.3%): 'drink' (Fl-, Mil+), 'knee' (Fl-, Mil+), 'louse' (Fl-, Mil+), 'small' (Fl+, Mil-), 'we' (Fl-, Mil+).

Male-Gis (92; Fl 1 & 1 deb = 1.6%, Mil 4 & 3 deb = 6%): 'claw' (Fl-, Mil+ deb), 'drink' (Fl-, Mil+), 'meat' (Fl-, Mil+ deb), 'name' (Fl+, Mil+), 'small' (Fl-, Mil+ deb), 'this' (Fl-, Mil+), 'white' (Fl+deb, Mil+).

As one can see, the average percent of cognates between Male and non-Omotc languages (i.e. "between the extremes of Afrasian" since Fleming opposes the Omotic branch to all other AA branches), according to Fleming's own cognations, is by no means equal to 'zero to one percent' (the few exceptions being Male-Iraqw = 0 and Male-Mkk, Male-Hs, Male-Mnd = 1%). Even if we equal two debatable cognates to one reliable, it will amount to almost 5% with Cushitic, 2.1 with Eg/Copt, 3 with Semitic, 2.5

with Berber, and 1.5 with Chadic (average with non-Omotoc Afrasian, 2.8). My equations naturally give a higher percent: 7.7 with Cushitic, 6.7 with Eg/Copt, 7.2 with Semitic, 7.1 with Berber, and 5.1 with Chadic. The average percent of cognates between Omotic, represented by Male as a random Omotic language, and other Afrasian branches is 2.82 for Fleming and 6.76 for myself. According to the table adduced in Fleming's letter, Greenberg's counting of cognates gives for his percentage a period between 16,000 and 15,500 BP for the Afrasian split, and 10,000 BP for the split between Cushitic and Omotic, while, for my percentage, between 9,000 and 8,500 for the Afrasian split, and 8,000, for the Cushitic-Omotoc split. The correlation table by Kruskal, Dyen and Black gives, for Fleming's percentage, 14,700 - 26,950 (20,825 Mid Point) BP for an Afrasian split, and 16,000 BP as a Mid Point, for a Cushitic-Omotoc split; for my percentage, it gives 13,500 BP as a Mid Point, for an Afrasian split, and 13,000, for a Cushitic-Omotoc split (see my datings in an Afrasian Genetic Tree below).

d) Cognates in selected Omot and other AA and their number, according to Fleming and the author

"Ongota is not Omotic, not Cushitic either, but rather a new branch of Afrasian."

In Fleming's List, 13 items in Ong are marked lws. Though I have serious doubts about some of these cases, in my calculations I not only eliminated 12 of these 13 items from scores (for 'green' no word is given in Fl while I took *çarka-muni* 'green, wet, green tree' from Fl Ong 48, *çerkamun* 'green' SLLE), but added to them seven more ('cloud', 'egg', 'fat', 'long', 'sand', 'tongue' and 'two') - practically exhausting a list of possible Ong loan-words. This was done intentionally to avoid any bias towards the "Ongota is Omotic" hypothesis.

Ong-Dime (82; Fl 8 = 9.7%, Mil 9 & 7 deb = 15.2%):

'big': Ong *gadah/hune* (Fl Ong 42; not in Fl list), *gaddahino* SLLE (also 'many'), *gaddaḡuni*, pl. *giddeḡeta* ST 117 (also 'old') = Dime *gad* (Bnd Ar 145; not in Fl).

'bite': n: Ong *gaḡa* = n: Dime *gaʔ*.

'breast': q: Ong *ḡama* = q: Dime *ʔemε*.

'drink': m: Ong *çafaw*, likely met. rel. to q: Dime *wūč* (Fl; *ʔuçu* Bla Omot < *ʔuč-?).

'eye': **f: Ong** *ʔááfa* = **f: Dime** *āffo* ~ *āppo*.

'hair': **u: Ong** *bīne* rather than not = **z: Dime** *band-e* (<**ban-t-*? Rel. in Bla Omot No. 36.3. to WOL *binnana*).

'kill' Ong *ʒi?* (Fl Ong 50), rel. to **z: Dime** *dēs* (caus. <*dē-* 'die'), if the latter is < **ʒ/ʒV-*.

'mouth': **b: Ong** *ʔíifa* = **b: Dime** *ʔapf* ~ *abb*.

'name': **h: Ong** *miša* likely met. <**sim-*, prob. = **h: Dime** *mízi* (Dime -z- <**-s-* needs proof).

'one': **o: Ong** *akala* = **o: Dime** *wokél*.

'round': **i: Ong** *mulq'o* = **i: Dime** *mil/mul* (problematic as -*q'*- in Ong lacks explanation).

'say': Ong *gisa* (Fl Ong 55; not in Fl) <*gi-is* = **u?: Dime** *gēmu* (gee-m(o) Bnd Om 216; cf. **u: Hamar** *gí*).

'see': **n: Ong** *yop* = **s: Dime** *yeef*.

'stand': **u: Ong** *yaw* = **h: Dime** *wuy*.

'tongue': **j: Ong** *ʔadaba*, prob. not rel. to, but a lw. from Hamar *atâp, adab* (v. Bnd Om 218), then not = **j: Dime** *îdîm*.

'who?': **h: Ong** *saay* (<**sa-ay?*), likely rel. by the -*ay* component to **g: DIM** *iyai* Fl, *ʔaye, āy* Bnd Ar.

Ong-Shin (79; Fl 3 = 3.8%, Mil 4 & 6 deb = 8.9%):

'bark': **s: Ong** *ʔagata/aqata* (cf. also *qaqqa* ST), likely rel. to Shin *koq-*ra** (Lmb Sh 337; not in Fl).

'claw': **t: Ong** *soŋke* = **t: Shin** *šungú-sa*.

'come': **a: Ong** *ʔē*, likely = **s: Shin** *w-* (*wà* LambSh) <AA **ʔayaw-*, cf. Janjero *iyōwa* id.

'eye': **f: Ong** *ʔááfa* = **f: Shin** *ʔáwa*.

'hear': **o: Ong** *ʔāš*, likely met. rel. to **q: Shin** *šiša, ši* (<**si?-/*si*?sa?-*; rel. to Ong in Bla Ong).

'name': **h: Ong** *miša*, likely met. <**sim-*, prob. = **b: Shin** *šúsa* (rel. by Fl to **b: *sim-**, though loss of -*m* needs explanation).

'nose': **f: Ong** *siina*, perhaps = **f: Shin** *šínṭa*.

'this': **d: Ong** *ʔinda*, rel. by the -*n* component to **k: Shin** *han*.

'water': **h: Ong** *čafawa*, likely met. rel. to **i: Shin** *aassa* (Fl; *ʔàacá, āča* Bnd Om 177; cf. Mao *háče*).

'who?': **h: Ong** *haakà*, rel. by the *k* component to **j: Shin** *kone*.

Ong-Bed (80; Fl 4 = 5%, Mil 7 & 1 deb = 9.4%):

'come': **a: Ong** *ʔē* = **a: Bed** *ʔi*.

'give': **p**: Ong *naʔa* = **m**: Beḍ *nun* (*inīyu* Bl Ms after Thelwall).
 'hand': **k**: Ong *ʔiʔa* = **k**: Beḍ *eyi* < *ʔVy-.
 'many': **o**: Ong *geda-huni* = **o**: Beḍ *gweda-bi*.
 'mouth': **b**: Ong *ʔiifa* = **b**: Beḍ *yaf*.
 'name': **h**: Ong *miša* likely met. < *sim-, prob. = **b**: Beḍ *sim*.
 'this': **d**: Ong *ʔinda*, rel. by its *n* component to **h/b**: Beḍ *un/t-un*.
 'what?': **j**: Ong *neeni* = **m**: Beḍ *nān*.

Ong-Bil (76; Fl 3 = 3.9%, Mil 4 & 2 deb = 6.6%):

'bone': **e**: Ong *miča* = **e**: Bil *naž* (*naš* < *ʔač < *mač-).
 'hear': **o**: Ong *ʔāš* = **i**: Bil *wās*.
 'knee': **i**: Ong *gibila*, hardly = **i**: Bil *girb*.
 'mouth': **b**: Ong *ʔiifa* = **b**: Bil *ab*, pl. *áfif*.
 'name': **h**: Ong *miša* likely met. < *sim-, prob. = **b**: Bil *siŋ*.
 'rain': **a?**: Ong *haaja* (*haša*), prob. met. rel. to **l**: Bil *zuwa*.
 'this': **d**: Ong *ʔinda*, rel. by its *n* component to **d**: Bil *niin*.

Ong-Had (81; Fl 3 = 3.7%, Mil 3 & 3 deb = 5.5%):

'bite': **n**: Ong *gaʔa* = **n**: Had *gaʔm*.
 'claw': **t**: Ong *soŋke*, likely = **p**: Had *ʔuraŋka* (< *ʔulu(n)k/k- = Sidama *čulunḱ-iččo* < E. Cu *šV(n)ḱ-Vl-, with metathesis and *č- < *š- by assim. with *-ḱ-).
 'knee': **i**: Ong *gibila* met. rel. to **i**: Had *gurubbo* < *gulubb-.
 'name': **h**: Ong *miša* likely met. < *sim-, prob. = **b**: Had *summa*.
 'nose': **f**: Ong *siina* = **f**: Had *sané*.
 'who?': **h**: Ong *saay* (< *sa-ay?), likely rel. by the *-ay* component to **e**:
 Had *ay*.

Ong-Yaaku (75; Fl 1 = 1.3%, Mil 2 & 5 deb = 6%):

'bone': **e**: Ong *miča* = **e**: Yaaku *močo*.
 'claw': **t**: Ong *soŋke*, perhaps = **r**: Yaaku *seḡil* (< *sVḱil, cf. Konso *šoloḱloḱ*).
 'l': **e**: Ong *kaata* < *ka-ta, rel. by the *k* component to **d**: Yaaku *iše?* (in fact, *iče?*, most probably < *yik-).
 'name': **h**: Ong *miša*, likely met. < *sim-, prob. = Yaaku *iši* (Bla Lists; not in Fl) < *ʔi-sim-?

'say': Ong *gisa* (SLLE; not in Fl), *gis-* (ST), very likely <*gi-is* (-is as a caus. suffix ST 92; cf. Ari *gay-* and *gay-s* id. Bnd Om 216), prob. rel. to **q**: **Yaaku** *oh/ok* (*okhoi* Bla Lists, *oko* Hei 'speak'), possibly <?**oghoy-*.

'what?': **j**: **Ong neeni = m**: **Yaaku** *n̄h, (di)nyh* (rel. by the **n* component).

'who?': **h**: **Ong saay** (<?**sa-ay?*), likely rel. by the *-ay* component to **g**: **Yaaku** *iyo* (Fl; not in Nei Ya) <?**V-y-*.

Ong-Dah (72; Fl 5 & 1 = 7.6% deb, Mil 9+1 deb = 13.2%):

'bone': **e**: **Ong miča = e?**: **Dah mičô**.

'dry': **p**: **Ong bafa-tuni = p**: **Dah ba?ama** (hardly unrel. in spite of Ong *-ʃ-* vs. DAH *-ʔ-*).

'good': **Ong wanna** 'good (for self)' (Fl 34, note 19) = **x**: **Dah wīne**.

'kill': Ong *ʒi?* (Fl Ong 50; not in Fl) = **t**: **Dah ʒe?ed** <*ʒe?-ed* (caus. of *ʒā?*- 'die').

'knee': **i**: **Ong gibila** met. rel. to **i**: **Dah gillibe** (pl.; *gilli* sing.).

'mouth': **b**: **Ong ʒiifa = b**: **Dah ʒafo**.

'nose': **f**: **Ong siina = f**: **Dah sina**.

'small': **q**: **Ong monnufeni** Fl, *munna?enə* SLLE <?**munnVʃ/?-uni = j?*: **Dah ʒāmína**.

'walk': **x**: **Ong rō/rota = x**: **Dah roʔ/raʔ**.

'who?': **h**: **Ong haakà** (<?**ha-k-*) by its *-k-* component is rel. to **g**: **Dah ʒiko** (< *ʒi-ko*).

Ong-Eg (79; Fl 2 & 2 deb = 3.8%, Mil 6 & 1 deb = 8.2%):

'ashes': **s**: **Ong tauni = a**: **Eg itnw** (Med).

'come': **a**: **Ong ʒee = a**: **Eg iy, iw**.

'fire': **o**: **Ong ʒohona** (<?**ʒoh-on-*) = **a**: **Eg h-t** (Pyr), *ʒh-t* (BD-Gr).

'T': **e**: **Ong ka/kāta** rel. to **a**: **Eg ink** by the latter's *-k* component.

'night': **a?**: **Ong ʒuo** (ʃ<?**h-?*), hardly rel. to **a**: **Eg wh-t**.

'rain': **a?**: **Ong haaja**, hardly rel. to **a**: **Eg hwy-t** (in this case *j* in Fleming's transcription for Ong conveys *ʒ*, not *y*).

'sleep': **a**: **Ong ʒaada = a**: **Eg ʒd**.

'this': **d**: **Ong ʒinda**, rel. by the *n* component to **a/b**: **Eg pn/tn/nn** (*n* is the deictic element).

Ong-Akk (80; Fl 3 = 3.7%, Mil 6 & 1 deb = 8.1%):

'big': **b**: **Ong arba = b**: **Akk rabû**.

'T': **e**: **Ong ka/kāta** rel. to **a**: **Akk anāku** by the latter's *-k* component.

'mouth': **b: Ong** *ʔiifa* = **b: Akk** *pû*.

'name': **h: Ong** *miša* likely met. rel. to **b: Akk** *šumu*.

'this': **d: Ong** *ʔinda* (<*ʔi-n-da), rel. by its second component to = **d: Akk** *anniw*.

'tree': **q: Ong** *hanča*, *iinsê* = **b: Akk** *išu*.

'what?': **j: Ong** *neeni* = **a: Akk** *mīnu* <*mi-n- (rel. by the *n component).

Ong-ArabSyr (81; Fl 2 = 2.5%, Mil 2 & 2 deb = 3.7%):

'mouth': **b: Ong** *ʔiifa*, not = **b: ArabSyr** *tumm-* < *fumm-* (in fact, < **tumm-*).

'name': **h: Ong** *miša*, likely met. rel. to **b: ArabSyr** *ism*.

'not': Ong *ma-* = ArabSyr *mū*.

'swim': **c: Ong** *šap*, not = **c: ArabSyr** *sabah*.

'that': Ong *ʔatakwida* (SLLE; not in Fl), rel. by the -k- and, prob., -d- component to **c, d: ArabSyr** *hadaak/hadiik* (<*ha-dā/ī-k).

'this': **d: Ong** *ʔinda*, prob. rel. by the -d- component to **g, c: Arab Syr** *haada/haadi*.

Ong-Jib (80; Fl 0 = 0%, Mil 2 & 1 deb = 3.1%):

'name': **h: Ong** *miša*, likely met. rel. to **b: Jib** *šum*.

'that': Ong *ʔatakwida* SLLE (not in Fl), rel. by the -kw- component to **Jib** *dʒkun*.

'this': **d: Ong** *ʔinda*, rel. by the -n- component to **e: Jib** *denu*.

'what?': **j: Ong** *neeni* = **b: Jib** *ʔin*.

Ong-Amh (67; Fl 1 = 1.5%, Mil 3 & 1 deb = 5.2%):

'mouth': **b: Ong** *ʔiifa* = **b: Amh** *ʔaf*.

'name': **h: Ong** *miša*, likely met. rel. to **b: Amh** *səm*.

'not': Ong *ma-*, by the *m-* component rel. to Amh *al...m*.

'what?': **j: Ong** *neeni* = **b: Jib** *ʔin* (rel. by the *n component).

Ong-Izd (75; Fl 1 = 1.3%, Mil 2 & 3 deb = 4.7%):

'cold': **o: Ong** *šanodi*, prob. = **e: Izdeg** *a-semmađ*.

'heart': **s: Ong** *ləta* (<*la-t-), very likely = **a: Izd** *ul*.

'T': **e: Ong** *ka/kāta* rel. by the -k component to **a: Izd** *nekk*.

'name': **h: Ong** *miša*, likely met. <*sim- = **b: Izd** *isəm*.

'swim': **c: Ong** *šap* = **e: Izd** *ššef*.

Ong-Hs (81; Fl 2 = 2.5%, Mil 1 & 3 deb = 3.1%):

'breast': **q: Ong** *ṽāma*, likely = Hs *māmá* (not in Fl).

'fat': **b: Ong** *mora*, rather a lw., not = **b: Hs** *mai*.

'name': **h: Ong** *miša*, likely met. < **sim-* = **b: Hs** *súná*.

'burn': **x: Ong** *ḵow*, *ḵoyka*, prob. = l: Hs *ḵónà* (= l: Mao *ḵiyan*), if < AA **ḵiw-an-*.

'this': **d: Ong** *ṽinda* = **d: Hs** *nman* (*wannan*).

As follows from the above data, the average percent of Ong cognates (out of 81 items, and, again, equating two debatable cognates to one reliable) amounts, in Fleming's cognation, to 6.75 with Omotic (9.7 with Dime and 3.8 with Shin), 4.3 with Cushitic (Had, Yaaku, Beḍ, Bil, Dah), 3.8 with Eg, 1.9 with Semitic (Akk, ArabSyr, Jib and Amh), 1.3 with Berber (Izd), and 2.5 with Chadic (Hs). My cognation again gives a much higher percentage: 12 with Omotic (15.2 with Dime, 8.9 with Shin), 8.1 with Cushitic, 8.2 with Eg, 5 with Semitic, 4.7 with Izd, and 3.1 with Hs. According to Fleming's real, not claimed, cognation, only one "zero case", between Ong and Jib, is attested, and there are three cases with 1% cognation: with Yaaku, Amh and Izd; the average percent of cognates between Ong and other Afrasian branches is 3.42. According to my cognation, it is 7. According to Greenberg's counting of cognates, Fleming's percentage corresponds to 14,000 BP as a time of a split between Ong and other Afrasian while my percentage corresponds to 8,500 BP. The correlation table by Kruskal, Dyen and Black gives, for Fleming's percentage, 20,212 BP (Mid Point) BP, and for my percentage, 13,500 BP (Mid Point).

Several more random pair cognations:

Shin-Jib (95; Fl 4 = 4.2%, Mil 7 & 2 deb = 8.4%):

'ear': **q: Shin** *wááza* = **a: Jib** *ṽiden*.

'heart': **a: Shin** *niba*, likely (if < **lib-*) = **a: Jib** *ub* (< **lub-*).

'horn': **b: Shin** *ḵála* (cf. Anfillo Kafa Mocha *ḵáro*) = **b: Jib** *ḵun* (< **ḵurn*).

'name': **b: Shin** *ṽúúsa* (< **sum-t-*) = **b: Jib** *ṽum*.

'road': **x: Shin** *wéra* = **d: Jib** *ṽorm* < **ṽur-m*.

'that': **t: Shin** *ěké* (*ekewí*), rel. by the *-k-* component to **c: Jib** *ḍṽkun*.

'this': **k: Shin** *han*, rel. by the *-n-* component to **e: Jib** *ḍenu*.

'we': **a: Shin** *nona* = **a: Jib** *nḵan*.

'who?': **j: Shin** *kone*, rel. by the *-n-* component to **a: Jib** *mun*.

Mao-Hs (99; Fl 2 & 1 deb = 2.5%, Mil 3 & 2 deb = 4%):

'burn': **l: Mao** *ḵiyan* = **l: Hs** *ḵóónàà*.

'drink': **n: Mao** *ĩš*, likely met. rel. to **a: Hs** *šǎ*.

'earth': **x: Mao** *ḵéšé* = **k: Hs** *ḵaasa*.

'this': **d: Mao** *na* = **d: Hs** *wannan*.

'woman': **g?: Mao** *mũncê* (*mũncèè* Bla Omot < **munṭ-*) = **g: Hs** *màčê*
(also *mâtâ* < **mat-*, likely < **mat-*).

Dime-Copt (98; Fl 3 = 3.1%, Mil 3 & 2 deb = 4.1%):

'bone': **a: Dime** *ḵús* = **a: Copt** *kas*.

'dry': **v: Dime** *wučum* (Hamar *wâčči*), likely met. rel. to **a: Copt** *šowe*.

'sand': **a: Dime** *šayi*, likely = **a: Copt** *šō*.

'stone': **y: Dime** *laalo* (assim. < **nāl*, cf. Dizi *nyalu*, Bencho *niʷl*, Naa *nʷelu*)
= **a: Copt** *ʔōne-* (continues Eg *inr* < **ʔVnil-*).

'what?': **e: Dime** *úyúú* = **e: Copt** *ʔū* (< **wʔ* or **ʔw*, cf. Vyc 228).

Dime-Izd (91; Fl 3 = 3.3%, Mil 4 & 2 deb = 5.5%):

'bone': **a: Dime** *ḵús* = **a: Izd** *i-ys*.

'come': **l?: Dime** *ād* = **h: Izd** *addu-d*.

'eat': **c: Dime** *ĩts* (< **ʔič?*), likely = **c: Izd** *t-š* (*t*-stem).

'fly': **a: Dime** *far* = **a: Izd** *afru*.

'small': **m?: Dime** *čêḵḵ* (assim. < **čigg-*?), prob. = **h: Izd** *mzy* (< **mV-zig*).

'that': **e: Dime** *cana* (*sánú* masc., *sáná* fem.), rel. by the *-n-* component to
h: Izd *-in* (*aynna*).

Dime-Amh (85; Fl 1 = 1.2%, Mil 3 = 3.5%):

'bird': **a: Dime** *íft* (< **Hi/af-t-*) = **d: Amh** *wof* (< **ʔVp-*).

'cold': **b: Dime** *ḵiž-*, *ḵež-in* = **Amh** *ḵäzḵazza* (not in Fl).

'mouth': **b: Dime** *ʔafo* = **b: Amh** *af*.

Dime-Hs (99; Fl 2 = 2%, Mil 6 & 2 deb = 7%):

'ashes': **u: Dime** *bĩnd-* (Hamar *bidini* < AA **bid-n-*) = **Hs** *hábdĩ*
< **ha-bdVH-* (not in Fl).

'bone': **a: Dime** *ḵús* = **a: Hs** *ḵàšǎ*.

'breast': **q: Dime** *ʔeme*, prob. = **Hs** *mámá* (not in Fl).

'ear': **g?: Dime** *ḵam* = **h: Hs** *kunne* (< **ḵum-n-*).

'fat': **w: Dime** *kūštu* = **k: Hs** *kíçè* (< **ḵic-*).

'hand': **i: Dime** *ʔane* = **i: Hs** *hánnú*.

'red': **Dime** *zu(u)* Hay Omot 265, *zuu* Bnd Ar 156, likely = **k: Hs** *žǎ*.

'that': e: **Dime *cana*** (*sánú* masc., *sáná* fem.), rel. by the *-n-* component to
l: Hs *nčan* (*wančan*).

* * * * *

As a final conclusion, my tentative results for Afrasian classification (to be specified in detail but hardly to be principally changeable) are adduced below (the numbers in square brackets, when placed after the name of a language branch, indicate the approximate date of the splitting of said branch; when placed after two languages separated by commas, indicate the date of their bifurcation, in millennia B.C. or A.D.). In this paper, as well as in my previous studies in genetic classification, for my glotto-chronological and lexicostatistical calculations I relied on Sergei Starostin's method (see Star) which is a radically improved and elaborated version of Swadesh's method.

Proto-Afrasian [-9.97].

I. South Afrasian/Cushomotic [-7.87].

I.1. *Proto-Omotic* [-5.36].

I.1.1. North Omotic [-3.99]: a) Dizi /Adikas/; b) Mao /Diddesa/; c) Gonga [-1.14] (Shinasha=Bworo, Kafa); d) Janjero=Yemsa; e) Chara; f) Ometo [-1.30] (Wolayta, Male).

I.1.2. South Omotic [-4.63]: a) Ongota; b) Aroid [-0.98] (Dime, Hamar).

I.2. *Proto-Cushitic* [-6.51].

I.2.1. North-Central Cushitic [-4.73].

I.2.1.1. Bedauye.

I.2.1.2. Agaw/Central Cushitic [-1.33]: a) Aungi=Auwiya; b) North Agaw [-0.04] (Bilin, Khamta).

I.2.2. South Cushitic [-4.65]: a) Dahalo; b) Maa=Mbugu; c) Iraqw, Qwadza [-2.65].

I.2.3. East Cushitic [-5.57].

I.2.3.1. Yaaku /= Mogogodo/.

I.2.3.2. Dullay [-0.05]: a) Gawwata; b) Tsamay.

I.2.3.3. Highland East Cushitic [-1.39]: a) Burji; b) Hadiya, Sidamo [-0.36].

I.2.3.4. Afar.

I.2.3.5. Lowland East Cushitic [-2.57]: a) Somaloid [-1.95] (Somali, Bayso); b) Oromoid [-0.79] (Oromo (Welegga), Konso); c) Galaboid [-1.07] (Dasenech=Geleba; Arbore, Elmolo [-0.04]).

II. North Afrasian [-8.96].

II.1. *Proto-Semitic* [-4.51].

II.1.1. South Semitic/Modern South Arabian [-0.68]: a) Soqotri; b) Continental South Semitic [0.42] (Mehri, Jibbali).

II.1.2. North Semitic [-3.55].

II.1.2.1. Akkadian.

II.1.2.2. West Semitic [-2.85].

II.1.2.2.1. Ethiopian [-0.89]: a) South Ethiopian [-0.30] (Amharic, Harari); b) North Ethiopian [-0.39] (Tigrai=Tigrinya, Geez).

II.1.2.2.2. Common Arabic [0.32]: Qur'anic, Syrian Arabic, etc.

II.1.2.2.3. Levantine [-2.01]: a) Ugaritic; b) South Levantine [-1.73] (Aramaic [-0.09], Hebrew).

II.2. *African North Afrasian* [-7.71].

II.2.1. *Egyptian*: a) Egyptian (Old Kingdom) [-2.55]; b) Coptic Bohairic [0.45].

II.2.2. *Chado-Berber* [-5.89].

II.2.2.1. *Proto-Berber* [-1.11].

II.2.2.1.1. North-West Berber [-0.88].

II.2.2.1.1.1. Zenaga.

II.2.2.1.1.2. North Berber [-0.42]: a) Atlas [0.07] (Semlal, Izdeg); b) Zenata [-0.16] (Shawiya, Qabyle (Mangellat)).

II.2.2.1.2. South-East Berber [-1.01].

II.2.2.1.2.1. South Berber/Tuareg [0.46]: a) Ahaggar; b) Ayr.

II.2.2.1.2.2. East Berber [-0.81]: a) Ghadames; b) Siwa.

II.2.2.2. *Proto-Chadic* [-5.41].

II.2.2.2.1. Central Chadic [-4.35]: a) Musgu; b) Mandara-Gudur [-1.73] (Mandara; Gisiga, Mofu-Gudur [-1.04]).

II.2.2.2.2. East Chadic [-3.64]: a) Tumak; b) Mokilko; c) Migama, Jegu [-0.85].

II.2.2.2.3. West Chadic [-4.10]: a) Bolewa; b) Kiir, Hausa [-3.87].

Abbreviations and conventions:

| | |
|-----------------|--|
| adj. | adjective |
| comp. | compare, comparable |
| deb. | debatable |
| imp. | imperative |
| lw. | loanword |
| met. | metathesis, metathetic(ally) |
| not sc. | not scored |
| nth. in com. w. | nothing in common with (usually referring to slip scores by Fl) |
| rel. | related, relates |
| vb. | verb |
| a: b: \$: etc. | Fleming's scores of the cognates |
| ? | lack of the appropriate term in Fl |
| -666 | in Starostin's procedure, a "zero" score marking a loanword or lack of the appropriate term |
| = | the author's score meaning "cognate with" |
| not = | the author's score meaning "not cognate with" |
| // | precedes the author's corrections, additions, substitutions or comments on Fleming's scores and data |
| ◇ | in Section IV, precedes Fleming's score and data and the author's comment on one item or several items united by a common discussion |
| - | separates affixed elements from the stem |
| * | marks a reconstructed proto-form |

in reconstructed protoforms:

| | |
|---|--|
| V | renders a non-specified vowel, e.g. <i>*bVr-</i> should be read 'either <i>*a</i> , <i>*i</i> , or <i>*u</i> ' |
| H | renders a non-specified laryngeal or pharyngeal |
| S | renders a non-specified sibilant |
| / | when separating two symbols means 'or', e. g. <i>*?i/abar-</i> should be read 'either <i>*?ibar-</i> or <i>*?abar-</i> ' |

- () a symbol in round brackets means 'with or without this symbol', e. g. **ba(w)r-* should be read **bawr-* or **bar-*
- ~ 'and' (points to two or more co-existing proto-forms)

Notes:

(1) Certain symbols for vowels used by Fleming (supposedly due to a lack of corresponding diacritics in his computer fonts) are in most cases replaced by more accustomed symbols, e. g. Amh *â* is replaced by *ä*, *î* by *a*.

(2) Forms in individual languages adduced by Fleming and scores (or the lw. mark) he ascribes to them are given in bold letters to distinguish them from the author's comments, e. g.: **b: Akk *našāku*, d?: Tuar *addəd*, lw.: Copt *lōks*.**

Abbreviations of languages and language periods:

AA - Afrasian (Afroasiatic, Semito-Hamitic); Ahg - Ahaggar (Tahaggart); Akk - Akkadian; Amh - Amharic; Arab - Arabic; ArabSyr - Syrian Arabic; Arb - Arbore; Aun - Aungi; BD - Book of the Dead; Beḍ - Beḍaue (Beja); Bil - Bilin; Brb - Berber; C. - Central; Ch - Chadic; Copt - Coptic; Cu - Cushitic; Dah - Dahalo; Dem - Demotic; Dyn - Dynasty; E. - East; Eg - Egyptian; Eth - Ethiopian; Gis - Gisiga; Gr - Greek Period; Gwt - Gawwata; Had - Hadiya; Hs - Hausa; Izd - Izdeg; Jib - Jibbali; Khmt - Khamta; Med - Medical Texts; MK - Middle Kingdom; Mkk - Mokilko; Mnd - Mandara; MSA - Modern South Arabian; N. - North; NK - New Kingdom; NS - Nilo-Saharan; Omot - Omotic; Ong - Ongota; Or - Oromo; P - Proto; Pyr - Pyramid Texts; S. - South; Sem - Semitic; Shin - Shinasha; Tuar - Tuareg; Tum - Tumak; W. - West.

Conventions in transcription:

- c* - alveolar voiceless affricate [ts]
- ɟ* - alveolar voiced affricate [dz]
- č - palato-alveolar voiceless affricate [tʃ]
- ǰ - palato-alveolar voiced affricate [dʒ]
- ʃ - hissing emphatic voiceless fricative
- ç - emphatic voiceless affricate
- ʒ - emphatic voiced affricate
- č̣ - palato-alveolar emphatic affricate
- ʂ - lateral voiceless fricative
- č̣ - lateral voiceless affricate
- č̣̣ - lateral emphatic affricate
- ḳ, q̣* - emphatic velar stop
- ɣ - uvular voiced fricative (Arabic "ghain")
- ħ - uvular voiceless fricative
- ħ̣ - uvular voiceless fricative (only in Egyptian)
- ħ̣ - pharyngeal voiceless fricative
- h* - laryngeal voiceless fricative
- y* - palatal resonant

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