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-Europeanismus... 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-Europeanismus" 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-Europeanismus" 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 miž-t and myz-t 'liver' quoted as mi'st (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 eesā and similar Omotic forms (<*ʔis-, rel. to Sem *ʔis-);

- Akk ʾēššu 'new' is scored differently from Amh addis, though both are from Sem *ḥadiit;

- Akk šaμm-im 'oil, fat, cream' is quoted as 'red', which is sâm- in Akk.;

- Jib ǧōd is scored with Amh ǧōdā; to do that one must be completely unfamiliar with "sound laws" as well as specific information adduced in the dictionaries: Jib ǧōd, pl. giżêd (<*gilad-) is <*gild-, to be scored with Ar-AbSy ǧild <*gild-, having nothing in common with Amh ǧōdā (cognate with Argobera ǧōdā, Gafat ǧōdā, Ėža Muher keōda 'skin' and further with Arab ǧaddā 'skin of a new-born lamb or kid');

- Amh ǧōrō 'ear' is scored with Or ḡurra, which is the source for the Amh loanword;

- Tuar ḡaggayen (by Tuar I mean the Ahaggar dialect - see below) is scored differently from Siwa aṣgay, Izd aṣgway, though the Ahg word is <*hauway (huway 'be red') and all the three are <*zauway <*zaωk implying a common score with Male zoke (cf. Oyda zoʔo, Bencho zoʔo) overlooked by Fleming;

- Tuar raim (a long outdated French way of rendering y as r; yawm is the correct form) 'sit' is scored differently from Siwa Izd qim, all 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

- Izd a-raγaz 'man' (<*a-raγaz, *-g regularly > Izd -y) is scored with Tuar a-lās <*a-halas;
- Kiir Kwor Kwota 'louse' is a loan from Hs kwarkwatâ (/*kʷar-kʷat-, cf. kwaro 'insect'), and not cognate with it.

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

- Gwt ḡakkad 'sit' is scored with ArabSyr ḡad, although we know that in the Dullay group of East Cushitic to which Gwt belongs, -Vḍ is a current verbal suffix (cf. Dobase gup-ad-, Harso gup-ad- and gup- 'to build'; Gwt ḡeṭid- and ḡat- 'to fly'), so Gwt ḡakk-ad has nothing in common with Arab ḡḍ.

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

One of the two Akk terms cited by Fleming is ḫumṭ-, 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 ḥmu. The latter, on the contrary, is cognate with another Akk term emm-, the main word for 'warm, hot' (not cited by Fleming) <*hmm. Neither Akk ḫumṭ- nor ArabSyr ḥmu has a single consonant common with Jib ḥub, also scored "d" (besides, it is also a noun meaning 'warmth, heat', not to be scored at all; šḫá-n-un is the Jib adjective for 'warm', not cited in Fl, v. JJ 264).

One more term marked "d", Izd ḥmu, 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 wēṭáni and is cognate to Tum ṣáy (scored "l"). He scores Hs zāfī as "h?" and ArabSyr ḏafī (cf. Sem *ḏaf) as "h" while they are actually not related, as Sem *ḏ does not correspond to ḥ z. Finally he scores as an "x" Dah ḥuɡužu, 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 rigorous. 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 ñtnw, attested in Med with the meaning ‘ashes’; for ‘lie’, Akk nîl (nîlu), actually meaning ‘to rest’, to be replaced by nîlu ‘to lie’; for ‘stand’, Jib ṣe, meaning ‘to get up, rise’, to be replaced by sôr ‘to stand’; for ‘bark’, Siwa ssu, 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 aei ‘all’). If we add 15 terms lacking in Fl 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 mwi ‘cloud’ scored “q” is marked as a loanword from Swahili in EEN 37, ngumine 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 wasām 'foot', scored 'i' in Fl, from W. Ch *tasam- (jimi asam, Miya ?ūmā, etc.), very likely met. rel. to Ma?a saîamu scored "q" in Fl.; I am inclined to treat Yaaku risîn 'hair' (scored 'p' in Fl) as going back to *riz-in- < AA *riš/ʃ- and relate it to Had odda (scored "q") which I presume to go back to *ʔord- <Cu *ʔV-rVʃ/ʃ- (cf. Kambatta orza-t, Burji ordu id. and Dah ʔiṭā-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 ʒar 'belly' is scored differently from Or gāra? because Fleming is probably unaware that Siwa ʒ continues *g; Akk eṣem-tu, Amh ṭaṭant and ArabSyr ṣaṣam 'bone' (<Sem *ṭaṭm- <AA *ṭaṭm-) are scored with Jib ṭiṭeż (in Fleming’s notation) looking very much alike, though the latter is a different root, since ṭiṭeż (the correct form, v. JJ) goes back to *ṭiṣaṭ- <AA *ṭiṣâ- (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 gâna scored with Bil bahar or Mao kêmê scored with Or gûđа?.

**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 - ḍV- and -nu, scored because of its ḍV- element with ArabSyr hāda/hādī (<*hā-da), and because of its -nu element, with Kiir nani, Hs nnan, a: Mnd (bo)-nu, Gis ḍama, Bed unɨ-ɯn, 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 cognition 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’, *ggeg* 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 *mrh* as ‘Salböl’ (EG) and ‘oil, grease’ (Faulkner), but not as ‘fat’ (Fl); they quote *nm* (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 cognition and debatable cases of our differences in cognition.

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), $ʒ$ (a “modernist” way) and $j$ (sporadically also renders [y] in Fl), e.g. Eg $jːb$ ‘leaf’ (Fl) instead of NK $dba$; and Med ǧːbt (EG) <“gːb” or “gb”.

2. Coptic: the dialect is not specified. The data points to Sahidic, although inconsistently: thus, Copt ʾtupḥaši ‘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 kloʔl-e ‘cloud’, scored “c”, in fact continues Dem klfl, klł and Eg krî scored “b” (Pyr ḫrr, MK ḫr) <“kVIVl (Vyc 76); Copt lōks ‘bite’ is marked “lw.”, though it continues late Eg
nṣk (Vyc 96); Copt ḫo 'head', scored "a", in fact continues not Eg ṭp, also scored "a", but ḏḏi; scored "s"; Copt enašo 'many' (also n-ašo) scored "c" continues Eg ṭṣi; scored "a" (<AA*VēVr>); Copt hineḥ 'to sleep', scored "d", is dissimilated from *hinēm (Bohairic hinīm), thus continuing Eg nmḥ, 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 erget, quoted by Fl as 'leaf' after Bit 13, is represented in JJ 292 as ērekt 'sheet of paper'; ṭēl '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 kezem '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. ḫat 'fish', nafs and ṭensi '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 suumne, 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-hanı 'blood', hağr-at 'long', etc., containing ḥ (<z), unambiguously point to
Ahaggar/Tahaggart, 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/bättin, 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. *hmu* 'warm', *raâta* 'see', *aťari* 'mountain' (*aťari* is the correct form <Arab *ʕurʕat*-'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. *giešümare* 'cloud' from Hausa *gäšimare*; *kwor kwota* 'louse' from Hausa *kwarkwali*; *namiši* 'woman' from Hausa *namiši*; *pyan* 'moon' (cf. PW Nigritic *-piam*- CLR I 119); *pyelê* '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 Bedauye (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. Khampa, or Khamtanga (Central Cushitic, or Agaw).

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

20. Boran Oromo (East Cushitic).

21. Arbore (East Cushitic).


23. Gawwata, or Gawwara (“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’ ◊ a: Eg awi // form transliterated in unusual way and impossible to identify; nb and tm are Eg terms for ‘all’. ◊ c: Akk kalū, Jib kōl, Amh hullu, ArabSyr kull // <Sem *k­all­ = p: Dah ʔakkále <*ʔa-kal- or *ʔak-kal-; not = c: Hamar wull (*k- not >w or 0 in Hamar), which, in its turn, = lw.?:
   Aun all-k, also wullá (Hamar, Aun and Dasenech lulli are rather cognates than loans from Amh hullu).

2. ‘ashes’ ◊ a: Eg zz // probably ‘dust’ (‘Staub?’ EG III 474) but not ‘ashes’ (not sc.); anyway, cannot = a?: Tuar izād (ézād, acc. to Fouc); lnuw Med. is ‘ashes’ (not in Fl) = s: Ong taunī ◊ c: Jib riňd // rather not = c: ArabSyr rimāː, but a loan from Arab. ◊ e: Siwa yirrud // not in Lao; in any case, looks like an Arabism (yirrumd ?). ◊ h: Bil șebar, Khmt tsābir // < Eth:
3. 'bark' ◊ a: Eg *geg? // unusual transliteration: judging by a: Copt kūk-e. Eg (Gr) kūk-ty is meant; possibly rel. to s: Ong ṭūqata (and ṣuqata < ṭak-at; cf. also qaqqat [ST], likely borrowed from TSA qaqqatte ibid., kaq SLLE) and further to t: Mao kōkāšê (comp. to Moča ṣqqo in Bla Om implying the primary stem *kōk- in Mao; unless <Koman kokeš) and Shin kookra (comp. in Lamb Sh to Gollango kookke which implies the primary stem kook- in Shin; not in Fl). ◊ c: Akk kulpu, Gwt ᠭGattlo // < kof, met. < kōf, neither = c: Amh ḫār-it, nor c: Bil karīf (lw., v. below), nor c: Male kurūbi < karūb (the Amh and Male forms are neither rel. at least on the PAA level, cf. Tigriñna ḫāraf and ḫārb-āt 'skin, bark' KT). ◊ e: Siwa ssuak // 'kind of nut-shell' (Lao), not sc. ◊ h?: Hs ḫawā // < bāḥ (= Bolewa bai ḫawe id.; ḫawe 'tree'), not = h: Tum boggōn < bVH-g- ~ *gVHb- (cf. Tera gābā). ◊ c: Bil karīf // < Eth (not vice versa, cf. Arab ḫrīf 'to peel'; v. LGz 441); ḫāf is 'bark' (RBil 236) = m: Aun qafi, Iraqw qafī. ◊ ?: Maṭa // igome HRSC 386.

4. 'belly' ◊ f: Tuar t-as // Ahg t-es = k: Beḍ ēssé = o: Maṭa mas (maso HRSC 387; likely <ma-so). ◊ g: Siwa ṣar // *gar = m: Or gāra?, Arb gerēl?, Gwt karietto, Iraqw gura? MKQ, guraṭa Bl Ms after Dempwolff; all < *garr?- (cf. Arab ġirīt-at, ġirīiy-at-'stomach of a bird'). ◊ m?: Had ǧōd-abo // < *g̪adab- (cf. Hs gādābā 'kidney' < *gaqāVb-); though -b- as a fossilized suffix is debatable, rather = l: Bil gwadug < *q̪aw̪iš (< q̪aw̪iš(3)). Khmt gizū (sic! 'belly' in Appl Khm; glossed as 'cuore, tegato' in CR Khm 215), Aun guzz; certainly not = m: Or gāra?, etc.; either the latter or Had has nth. in com. w. m?: Yaakū irēh (a slip?). ◊ u: Dizi čǒnu // < cVn-? Either rel. to v: Dime šinē or both are lws. <Surma: Meqan širi; v. Bla Omot No. 40.3.).

5. 'big' ◊ i: Izd ḥatar // ḥiter (vb.), not sc.; a-mug-an is the main term for 'big' = g: Tuar amyār < *ma-ḳar-. ◊ n: Gis madadān // <ma-dadang, likely = r: Aun duguri (duguli Bl Ms after Hetzron) < *dung-url-. ◊ p: Dah gāno // nth. in com. w. p: Bil bahar (a slip?). ◊ q: Maṭa gilu // gilu Mein 309, -gilu HRSC 386; not = q: Khmt ḥiyaw but = j: Kiīr gor. ◊ r: Iraqw ur // not = r: Aun duguri (a slip?). ◊ s: Mao keme // nth. in com. w. s: Or gudda?, Arb guddā, gudy-da (a slip?); the latter forms are likely rel. to Ong gadah/hune
'big, many' (Fl Ong 42), gaddahino 'big' (SLLE 4), gadda.funi, giddêfêta 'big, old' (Sava 126) <gVâdâfôh- (also related to Dime gêd 'big'). ◊ x: Hamar onja // = o: Shin énâ, Bed won (cf. also Janjero innya, Somali weyn, Elmolo wânyâ; all < *wan-y- ~ *wan-yr-).

6. 'bird' ◊ b: Akk îssûru // <ısṾsûr- (Ugaritic šsr), not = b: Jib ʃsêfêrit <ıVšûr- <ıV-ʃVpVr- (Fleming is innocent in this case; relating these two roots is a traditional Semitists' mistake); met. rel. to p: Iragw cirfo. ◊ e: Tum dêri, Mkk dot, Kiir dot, Gis diyeu (also Migama ðidû) // <ÂVH(-at)- ~ *ÂVHdÂVH-, neither = e?: Mnd giye, ãjye (see below) nor = e: ArabSyr ãyir (the Mnd and Arab words have nth. in com. either). ◊ j: Aun čara/čaga // čâyâ Hetz, čogâ CR Aw; <č/čak/κ-, rather not the same as j: Bil ǯayala, Khmt zïlì <șṾṾṾL-. ◊ a: Dime iht, Hamar atti // ap/ʃt-i <ÂVf-t- = d: Amh wof <ıVp- (Geœz sof, etc.), and not = a: Eg ᵼVd (Dime and Hamar -t is not <*-d or *-t; Eg -t is not <*-t). ◊ q: Ong karbo // hardly a separate root; either a met. <kabr- <kambVr, rel. to k: Or sipìrrê, Arb kimâ-te, Maša hîmero or a lw. <NS, cf. 'bird' in Bla NS: Nara karba, Surma: Kwegu kubor, etc.

7. 'bite' ◊ lw.: Copt lôks // continues late Eg nśk (Vyc 96); not a lw. ◊ b: Akk našâku // <ntk (Hebrew nśk, Geœz nsk, Mehri nef, etc.); rather to be separated, at least on the proto-Semitic level, from b: Amh nákkasā <ntk (Syriän Aramaic nkt, Tigre nákša, etc.). ◊ d: ArabSyr fadî // <ntē, not = d?: Tuar addad, Siwa addad <Hadd- and d?: Mkk țîîd <?ayVd-, but likely = r: Dizi wâč j: Bil taṭän // 'to mill' RBil 345 (not sc.) <Sem ᵵthm; cannot = j: Male dâî (kwaŋ is 'bite' in Bil). ◊ q: Dah kah prob. = q: Iragw kîh (note that k- <*k is irregular), but not = q: Shin šâč, Chara sâč ◊ q: Maša ne // -ŋe HRSC 388, likely = l: Aun aŋa-ŋ. ◊ o: Mao lâši // nth. in com. w. o: Gwt ġaw, Yaaku -qaw- <kaw (a slip?).

8. 'black' ◊ o: Eg ḳm // neither = a: Had hêmaça, Dah hîmmâte, Maša hame, all <hî/âm(-at), nor = a: Yaaku kumpu, Gwt kummay (<*gumbṾ-: obeze kumfa, Tsamai guma, Bayso ka-gamb-ali id.); the Had-Dah-Maâ are neither rel. to Yaaku-Gwt. ◊ b: Akk adru, c: šâlμu // adru 'sad, dark', not sc.; šâlmu < Sem *šalμ- < AA *çal-m-; not = c: Tum dâlmî (Tum ḳ not <*çî), but poss. = o: Bil nišîr, Khmt niĉîr (prob. also o: Aun car-ki) <*nî-çı- <*çîl- ◊ e: Amh fašur // <Agaw: Waag šikur, Aun šarki, carki. ◊ i: Izd abešuš // <*bṾbṾ-uš <bẈk- (cf. Izayan a-šaɦ-ani) = l: Hs bâki.
9. 'blood' ◊ a: Eg snf // znf (in EG the voiced z is conventionally rendered by the symbol s) <"źn-f' his blood' <*źVn- = d: Tuar a-henî <a-žini (Ayr a-žni, Ghat a-žoni) and Hs žini <*žini (all <AA *žin-). ◊ b: Hamar zum? // <AA *žVm- (SED 267: Sem, Chad), not = b: Akk, Amh, ArabSyr (< Sem *dam-). ◊ h: Ong šuho // *šu-ly- hardly = h: Yaaku sog’o (Fl; sógo Hei Ya, sógo Ehr PC 97; regarded ibid. as a lw. < S. Cu) and h: Maʔa saho (sako HRSC CTP. Cf. MEINHOF) <*saʔ; relation to h: Chara sâ-la. Male sugu-c is unclear as the reflexes of ḫh in Omot. are not reliably established.

10. 'bone' ◊ b: Akk esem-tu, Amh ṭaṭant, ArabSyr faẓam // <*ṭaʔm-, not = b: Jib ṣiṣeq (ṣiṣeq) // < Sem *ṣiṣeq- <AA *ṣeqeʔ. ◊ a: Mkk ḍossû, Mnd ṣeše, a?: Gis ṭateq, Dizi ḫus // all < *ʔVs-, not = a: Eg ḫs and the rel. forms (Copt, Tuar, Siwa, Izd, Hs, Dîme) < AA *kas-. ◊ lw.: Khmt aćan // where from? Ṿac Apil Khm = e: Bil naẓ RBil (năš Bnd LE), Aun nac (Ṿac Bl Ms after Hetzron) <Ṿac- (Khamir Ṿac) <*maʕ-. Yaaku močo = e?: Dah miččo (<*mičč; hardly a lw. as in HRSC 386), Ong miča and likely = i: Mao maltâ (<*maʕčiʔ-?); the latter hardly = i: Chara métra.

11. 'breast' ◊ b: Akk tulû // tulû is rather 'nipple, teat' (Brust(warze), mamma' AHw 1369); irtu 'is breast' (chest, breast' AHw i 184; 'Breut' AHw 386) <*tirt- (Ugaritic ?rt) = r: Mao ṣaare. ◊ e?: Arb edu-ma-an // edum-an = e?: Gwt ʕadun-ko (<*ʕadûm-ko), Yaaku ʕeḏûm-in (pl.), Chara ḭama and the rel. Omot terms (all <*ʕadûm- <*ʔâʔum-), neither of which = e: Amh tut <*ṭub- (Geʾez ṭoḥ, etc.), or e: Gis duwa <*duHu-, or e?: Dah lōne (form with a "click" < Sandawe EEN 48); Amh and Gis, to say nothing of Dah, are not rel. either. ◊ lw.: Bil ṭaṭab // so Bnd LE (lw. < Eth); ungû RBil (?urlû< Bil Ms after Palmer) is the inherited term, same as n: Aun angu.

12. 'burn' (trans.) ◊ a: Eg ṭakh // ṭakh (and ṭkh) is 'light fire; burn down' (anyway, not = a?: Tum ḍuʔ <*ruʔ-, *rub- or *ruγ-, but not <*ruκ-). ◊ c: Akk karuru // no karuru in CAD and AHw. ◊ f: Jib šeʔof // build a fire, put on fire' (Jl 254; 'anzünügen' Bit 69), not sc.; e-nḥê is 'burn' (Jl 187; 'brunken' Bit 54). ◊ e: Amh nedd // nđd has nth. in com. w. e: Copt muḥ (a slip?) < Eg m:ḥ (anyway intr. vb. in all Copt. dialects Vyc 131; not sc.). ◊ i: Tuar ḥag // Ahg aʔu (Ayr aʔun) <*Hakw; not = i: Mkk ṭog <*HVγγ-<, not <*HVκ-, Arb ṭog-ad. ◊ c: Bil harar // rather a lw. <Sem ḥuhr. ◊ s: Khmt hau // hau-h 'to warm up' (riscaldare' [CR Khm 218]), not sc. and nth. in com. (a slip?) w. s: Or gub-. ◊ x: Ong kow, koyka = x: Hamar koo-ka // koka (Bnd Om 207), likely rel. to Maʔa -ka (HRSC 388; same as i: aha in Fl?) <*ʔaʔ (v. HRSC 26).
13. 'claw' ◊ e: Izd a-ḥbaš // likely an Arabism; iššer and i-skir are the inherited terms for 'claw', same as d: Tuar and Siwa (<i-skar>). ◊ g: Tum pulāl // <parīl-: Migama (婆婆); Jegu fillō = i: Ḥs farē <far-t-. ◊ c?: Bil čiffer // čiffer, a lw. < Eth.. ◊ j: Gis dilek // ḥeḳeel, ḥeṇek <§Vl/nV-, likely met. rel. to l: Ḥamṭ ḥiṣēla (<¢ḥičën-), n: Or ˈkēnsa, p: Had ṣārāṅka (<¢tulun(uk)- = Sidama ṣulun-ikčō, with *¢- <§- by assim. with *¢-; 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 sęgil (<¢Vkil, cf. Konso šokšoklo; the latter hardly = r: Dah coolo, not <coḳol- as *k > Dah k, not 0), rel. to t: Ong sōŋke (sonqitte Bla Ong), Shin sūŋū-sa, Chara ʂuŋa, Male ɕúngu; all < AA*ṣünk-al-, with diverse assimilations, dissimilations and metatheses in different languages.

14. 'cloud' ◊ c: Copt kloʔl-e // continues Dem Ḫisl, kl = b: Eg krl (Pyr krr, MK krr) <¢Vlv (Vyc 76). ◊ lw.: Āmḥ ḏāmānā // an inherited Semitic term (cf. Arab damm, dimān, AramSyr dim-at-), while m: Khmt dimēna, Or duúman-sa and, likely, Shin dāwna (<¢damm-) are rather lws. < Eth. ◊ h: Tum ubāy // rather <Hubay, hardly rel. to h?: Bed bál ◊ i: Kīr gāgiumāre // lw. <Ḥs gāgiumare. ◊ n: Aun gunkānnī // dissim. <¢gun qa(? (cf. gun 'fog') likely = f: Tuar t-aŋ努-t (Abg a-ŋanna), Izd i-s-ŋu <¢ginaw- ◊ q: Dah mawiŋu // lw. <Swahili (EN 37); njgiŋu is the inherited term in Dah rel. to Sidamo gomna and Wolayta guma. ◊ t: Ong pfolo // folk ST 117 = t: Ḥamār polo. The Ong form prob. a lw. < Ḥamar or Tsamai poolo [ST] and [SLLE]. ◊ w: Male šāri // = r: Maṭa hlar (išare HRSC 387) < Cu-Omot *çar- or *șar-.

15. 'cold' ◊ b: Jib kezzem, c: qışem // no kezzem either in JJ or Bit; kūṣn is 'cold' (n.) JJ 152, likely rel., with suffixed -m, to b: Akk kāṣū (kāṣū is the correct form) <¢kāṣw-, and c: Dizi keç-us <¢Vs-, but not = b: Had kid <¢kīš-; the latter = Āmḥ kāzkazz (not in Fl) and b: Dime kižin and Hamar kāźi <¢kāži/. ◊ ?: Mkk // re müdahale [JMMk 166], māye 'cold (of wind)' CLR II 81. ◊ g: Tum da // had (CLR II 81) <¢sad <¢sand- = i: Ḥs sānî (sānî ibid.), likely <¢sani <¢sand- <¢sand- = e: Tuar semeq-en, Izd a-samnad and perhaps o: Ong ʂanodi (¢samVs- with *m- assimilated to -d, <¢samVs-; with a shift of "emphatization"? The cognition based on this hypothetic reconstruction makes sense only if Fleming's record of -d- is correct; cf. šantuni/cantoni/ʂanodi [Fl Onq 44] and can- 'to be cold' [Sava 124]). ◊ n: Dah willîfīne // <¢wîrin, likely = j: Bed ɬṭa (ɬṭa RBed) <¢lαt-, Gis leļen <¢VlVn (Jegu ḏölān, met.) and, probably, Mkk rélē (not in Fl), dissim. <¢lVlV?-
16. 'come' ◊ c: Akk kašādu 'reach, arrive (moment of time), amount to, approach' (CAD k 271), not sc.; alā- is the main term for 'come'. ◊ g: Siwa us- and Ahg as (not in Fl where Tuar/Ahg imp. éo is quoted) = k: Mnd so (not *s20), Gis sawa, not = k: Hs zō (not *s30). ◊ b: Mkk b- // ībī with a different meaning JMKk (not sc.); for 'come' CLR II gives ?īdō = h: Izd addu-d <*Hadw = s: Chara wod = l?: Dime ād, all <AA *Hiladw- ~ *(HV-hwad-). ◊ j: Kiir wade <*wat- <*Hwāt- (cf. Tule wūtā, Tangale watu, Karekare eti, Sokoro ūti), not = j?: Had wār. ◊ s: Shin w- // wā LambSh, not = s: Chara wod, rather = a: Eg īyw, Copt īi, Tuar ēō, Bed ʔī, Ong ʔē, Dizi y= = i?: Tum ʔ <*ʔaw-, etc. (all <AA *ʔawaw-, cf. Janjero iỹwa id.), but not = i: Mkk lāl (aller à la maison, chez soi, etc.) JMKk 55; not sc. ◊ p: Ma’āla līta // <*līt-t-? Likely = m: Yaaku le’t (rel. in HRSC 389).

17 'die' ◊ b: Bed ɣa // yāti, nth. in com. w. b: Jib harīg (a slip??). ◊ h: Yaaku kehe // rather <*gVh- = i: Ma’āla, Iraqw gwʔi (gwāʔ- MKQ 42); note, however, that Yaaku -h vs. IRQ -ʔ is irregular.

18. 'dog' ◊ f: Mkk gēdē // <*gād- (cf. Mofu-Gudur gādē id.), not = f: Tum ga, pl. garak (<*gar-: Lele gīrā, Kabalay gāra). ◊ i: Bil gidīn, Kmt gōzan, Aun gāsen // <*gīz5in- = e: Siwa agurzani <*gu(r)zi5in-, with -r-inserted; hardly rel. to ʔī: Hamar āksī (acc. to Bnd Ar 148, Hamar kāskī, Ari āksi; rel. to Brb: Ahg āṣī 'loup' F 1529, Ayr lā-yāς-t, E Wlm ʔi-yāς 'chien-loup' Aloj 73 < AA *ʔaṣa-y); neither Agaw nor Hamar = i: Yaaku kwehm (khen, pl. kwehman Hei Ya) <*k=ahm-; the latter very likely = l: Mao kānē and the rel. Omot terms. ◊ k: Iraqw seʔay // met. <AA *ʔaς- = h: Bed ɣās, Had wūsā (wawsi-ččo, pl. wusā).

19. 'drink' ◊ a: Eg zwr // = a: Copt sō/sū <*zwir, but not = a: Tuar osu, Siwa and Izd su, Tum hē, Kiir se, Hs šā, Mnd šeš (šāš, šūšē), Gis šeš (and sī), which = n: Mao iš, Shin uš, Chara uš, Male uške (uš-ke), all < AA *suy- ~ *wis-. ◊ a: Eg bbf (noun) // vb. (must be sc. differently from a: Eg zwr); very likely rel. to p: Dizi bē- (bē, bay). ◊ h: Arb ʔīg-e // not = h: Or dug. but = i: Had ag and j: Gwī ukk, all <*gV(ʔi)-: likely met. rel. to g: Bed gwʔ (gū? RBed) <*guʔ. ◊ i: Yaaku eg // -eq- Hei Ya (~ <*k), not = i: Had ag.
20. 'dry' ◊ a: Eg św, Copt šowe // < AA *致します (→ Kafa šu?o id.), likely met. rel. to v: Dime wūcūm, Hamar wačči <wač-; the Eg and Copt forms have nth in com. w. a?: Akk šābul-um (šābul-, š-stem <?bīl); the latter = k: Bed balama (bāl-ama RBed). ◊ b: Jib gušūn, c: qisaf // no gušūn either in JJ or Bit; kēšaf is 'dry'. ◊ ?: Mkk // mēdē JJMkk 138. ◊ i: Hs busatā // < buše (vb.), very likely = e: ArabSyk yabis.

21. 'ear' ◊ a: Eg *iṭn // if this unusually looking form is a reconstructed proto-form for كدح, it is not the case, as كدح is rel. to Sem *tudh- <AA *tudh-; besides, كدح is a graphic sign depicting ear and as such can hardly be sc. ◊ c: Copt maṭṣ // (Bohairic maṣṣe), continues Eg m-sdr (the main Eg Pyr term for 'ear', not in Fl), likely <m-s-gWd, cf. Med gny-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-gū < AA *ṭiug-, cf. E. Cu *ṭelogi-'hear') or c?: Hād maṭṭa (the Brb and Had terms are neither rel. to each other). ◊ d: Amh ṣoro // lw. (not sc.) < d?: Or gurra. ◊ h: Hs kunne // <kum-n- = g: Kiir kām <kam-, g?: Dime Hamar kām and Gwt qaanté (so Black 295 and AMS; Fl quotes k: Gwt ḥahhaw) <kam-t- ◊ q: Mao waale // probably = q: Shin waāza, Male woya (cf. Mao mele 'liver' vs. Male mayzi, Chara mayya <*mayy3-), but may alternatively = n: Maṭa ilama (<*ila-ma?); the Shin and Male forms <waṣ- are anyway rel. to a: Akk uznu and the rel. Sem terms <*tu/heid- <AA *tuiʒ-n-). ◊ p: Ong ṭoowa // rather = q: Chara woya (hardly <*waz-: *z is not expected to yield Chara -y or 0), o: Dizi ṭāāi and o: Iraqw eʿa.

22. 'earth' ◊ e: Amh afār // 'ashes, soil', not 'earth' (not sc; mare-t and madar correspond to 'earth' in Amh). ◊ f: ArabSyk trab // 'soil', not sc. ◊ m: Bil bira // <ʿbir-, not = either m: Aun batī < Agaw *bo-t- (→ Bil Khamir bata, cf. Appl IC 38) or o: Or bīyyet (<Cu *bīyy-, cf. PEC 43); rather not = m: Bed būt, accus. < ʿirt- (RBed 50) < Cu *bīt- (→ *bīt- and *bīt- are two different roots, cf. Arb bīy ‘land, earth, field’ and bōre ‘earth’, not in Fl). ◊ t: Dah gudde // <gud (HRSC 239) = h: Siwa i-żidī <*gidy ‘sand’ (cf. Ntīfa i-gidi id., etc.), ◊ x: Mao keśë // <kass- (→ Kafa ḱašā, Bil ḱūšā ‘sand’) = k: Hs kaasa.

23. 'eat' ◊ e: Kiir šī // 'eat soft things' <ṭī (cf. Diri, Zaar, Wang ṣi) = c: Siwa oč, Izd ḍi/č at (t-š), Dime ots, Hamar its (is Bnd Ar) <ṭi-, not = either e: Tuar akṣ <kṾs or c: Jib tē, Hs čī ('eat soft things' <ṭī), Had it (met.). ◊ a: Tum wām // nm ('eat hard things'), not = a: Copt wōm continuing Eg unum (caus. s-nm) <AA (w)lm (Sem: Akk lamāmu 'chew', Arab ʿām IV 'regale',
24. 'egg' ◊ lw.: Amh ēŋkulal // ank’alal (not a lw.) < ṣVn-kulalih- (SED 153-4), met. rel. to: jib kōhl-āt ( kèḥžīn J = Mehri kāwīḥol, Soqotri khol-hin) <*kα(β)hI- (<*kαhI- likely yields Mao k-); further rel. to l: Bil kagaluna (kagālūna RBil) < kākal- < kāhl-, Khmt qululūna <*kulul- < kuḥul- (not in AA *(ʔan-)kəhI ~ *(ʔan-)kəlih- (met.), probably eventually rel., with *-l suffixed, to Cu *k’a(n)h- (v. below) ~ Sem. *(ʔan-)kəhI-). ◊ d: Tuar t-ekāti-t // not sc. as not used in Ahg (Ayr tē-kāti-t 'egg'); ta-s-ādal-t is 'egg' in Ahg. ◊ l: Aun āŋkulaluwa // ank’alal (Hetz), not sc. as it is rather a lw. < Amh ank’alal (as well as Bil ank’alal RBil and Khmt engulūlih) CR Khm, lws. synonymous to the inherited forms quoted above). ◊ i: Mnd śey // šeya, šaša CLR II 123 = j: Gis teč < t-Vc- (Muktele čāčāi) <šay-, likely with a secondary lateralization < Ch *sayH- ~ (met.) *Hayes-(Goemai luas, Fyer ḫyēs, Tsagu ṣoḥyī, Jimbin ḫshū, Zime-Dari slae, Birgit isīqī) = a: Eg swḥ-t, Copt sōwḥ-i (all < AA *sawḥy-). ◊ k: Ong fugaḥe // also ṭukaḥ-e-da SLLE 6; hardly rel. to k: Gwt ukāhe, but can be a lw. < Tsamai ṭuğařati id. (SLLE 6), ukāhay-te (Bl Lists); cf., however, Ong ṭ- vs. Tsamai ṭ-, and the striking affinity of the Ong form with = m: Dah fūgoee (tōgōti Tos Dah 137). ◊ k: Māṭa hohohah // and ikokohe <*kVh/kVh- (cf. HRSC 26) = n: k: Gwt ukāhe (<*wukaḥ-), Ong fugahe (v. above), but = o: Had künkā, Iraqw qānḥi < Cu *k’u/a(n)h- or *k’u/a(n)h-.

25. 'eye' ◊ d: Mkk /terms-sā, Kiir yir, Gis re (and hiri) < Huíir- not = d: Tuar t-ed-t (Ahg t-it ), Siwa t-ṣṭṭ, Izd t-ṭṭ ( < t-Hid-t ), Hs tīḍō, Mnd iče ( < t-H-; cf. Jimbin ṭída, Migama ṭić, etc.) < Brb-Ch ṭīḍa/. ◊ d: Tum tūwā // tūwā (CLR II) may be either < t-Hur- (sc. with Mkk, Kiir and Gis), or < t-Hur- (sc. with Hs and Mnd).

26. 'fat' ◊ b: Eg mrḥ-t // 'oil', not sc. (< ṭawṛ 'to oil' EG II 111); nth. in com. w. either b: Hs may (māi 'oil, fat, grease' Abr Hs 638), likely < ma(H)r- (cf. Sura mmmīur, Bata mārē, Bachama mare CLR 132-3; cf. also Stolb 82), b: Ong mōra < AA *mar- (unless a lw. < Tsamai or Or; cf. Tsamai moor, Arbore moora SLLE 6; cf. also Aun mori, not in Fl, Or moora; Akk marū id., Ugaritic
mru, Hebrew mărî 'fat cattle'; Male môresî Bla Omot <*mor-as-), or b: Mao mále, Male malle (in Bla Omot No. 26.5. reasonably comp. to CCh: Kilba mal, Margi mæl, etc.) < AA *mal-; *mar- and *mal- are better to be treated as two different roots. ◊ c: Akk šəmmun-um // 'to oil'; šammu is 'oil, fat' < AA *samun- = c: ArabSyra saman, not = c?: Jib šabb (šabbûn J]) 'fat' = Amh sâb (the inherited term for 'fat', not in Fl., where Amh lw. ñoma (is quoted) <*šabb-. (Geçe šabal) < AA *š̱abl-. ◊ a?: Tuár udi // 'oil', not sc. (anyway, not = a: Eg ifd, as Eg d does not correspond to Brb d); t-ádon-t is 'fat' in Ahg < *dVhLVn = e: ArabSyrdin- = Khmt dîn-o (not in Fl where p: Khmt wdlim is quoted, which is an adj., not sc.). ◊ s: Gwt kôpi // <*gôb- (Tsamai gôb-i), hardly = s: Diz kôbab (*g- > Dizi g, not k). ◊ n: Dah tahlî (in Fleming's notation) // ?âši < AA ?âš- (Qwadza ašito), not = n: Yaaku ila, Bed lâ? (=*lab-) Note, however, that Yaaku -h vs. Bed -? is irregular.

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

28. 'fire' ◊ t: Akk is-um (išātu is the correct form) // = b: Amh isat (is-at-) < *?š-at- < AA *is-, not = b: Jib šôt <*šiwaṭ- (Soqotri šiyaṭ id., Arab šiwaṭ- 'flame') < AA *šwaṭ-. ◊ a: Tuár a-kû // 'be lit', not sc.; anyway, not rel. either to a: Eg hî (hr-tw) or to a: Izd a-fa, a?: Gis lavo (<?afaw-), cf. Gider afû, Kotoko fn); the latter two forms = Ahg efew 'fire' (not in Fl), but they have nth. in com. w. a: Eg hî: t-tw-mâ is the other Ahg term for 'fire' = f: Siwa t-imsi. ◊ a: Mkk żûwîwô // likely <*HVwÎw- (cf. Mofu ãwôv, etc.), probably = Tigriñña ɔûwâ-i id., but not = either a: Eg hî or a: Izd a-fa, a?: Gis lavo. ◊ a?: Arb ðeeq, a: Yaaku ikú, Dah ðêga // all <*ðig-, 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 ðohona // very likely <*ðô-ôn- = a: Eg hî (hr-tw Pyr, ãl-tw BD-Gr) <*HÎlÎ (also = Qwadza ɔaʔo id., met.).

29. 'fish' ◊ d: Jib hut // lw. <Arab, not sc. ◊ g: Tuár emen // not used in Ahg (see Fouc 1207); a-sulm-ug is 'fish' in Ahg = h: Izd a-slem. ◊ o: Gwt ðaare // < Dûl *kar- (v. Bla Ong), hardly = o: Ong kaare, Ham kaara; rather a lw., as the distribution of languages (also Dasenech kâra) points to an areal term likely of SOMot origin (cf. also Banna kaara id. Bla Ong after Fleming). ◊ q: Ira qw siyyô // siyyô, siyô; if, acc. to MQK, < Bantu, not sc.
30. 'fly' ◊ c: Akk ša?u // 'fly about, flutter', not sc.; na-pruš- is the main term for 'to fly'. ◊ t: Amh -brer // bāṭrāt, a debatable case: rather <Cu than an inherited term (cf. SED l 4), in which case not = t: Had barar- and the rel. forms <*brr; the latter hardly = t: Shin bid as Shin -d <*-r needs proof (cf. LambSh 281). ◊ f: Tuar ʾillai // Ahg ʾelli, Ayr allay, etc. 'soar', not sc. ◊ g: Tuar iggad // Ahg iggad (not iggad) 'fly' <*-wawād. ◊ u: Siwa ʾāmṭar // ʾm-far = a: Eg p̣i/ ỵpa w, Jib frr, Bil fir, Maša puru, Dime far; as for a: Yaaku pēri, it can be either <*pir- or <*bir- (= t: Had barar- and the rel. forms). ◊ l: Ong ʾḥay // does not mean 'to fly', but 'to rise, stand up' (Sava 112, Fl Ong 47; 'to fly' is conveyed by the compound ʾḥaiḥškurru SLLE 6); cannot be rel. to l: Arb hate, Gwt ḥeʔ-id.

31. 'foot' ◊ i: Kiir wasām // <ʔas-am- (Jimi assam, Miya ʔonmā, etc.), very likely met. rel. to q: Maʔa saʔamu. ◊ l: Bil zaguana // ṣāq̣aʔanā 'heel, hoof, foot'; luk is 'foot, leg' = m: Khmt liʔkw and the rel. terms. ◊ a?: Dime dooto // not = a: Hamar rro; neither one = a: Eg rd (Eg r <*r or *l, d <*d or *t).

32. 'full' ◊ c: Tuar ḫtkar // Ahg ḥtkar = d: Siwa čür <*ṭsur <*ṭkur <*ṭkur and, probably, h: Ḥs čḫkē (ʾṭṭkarkar- <*ṭṭkar-?); nth. in com. w. c?: Bil intaʔ-ax (intāḡ 'be full' < insāḡ 'fill' R Bil 40 <*tinḡčaʔ-) which = k: Khmr yečaʔ (<*ɣitāq-). ◊ b?: Izd ḥmmer // ḥmmer < Arab (anyway nth. in com. w. b: Akk malāʔ-um and the rel. Sem forms <*mlt; a slip?). ◊ f: Tum an // = i: Mnd ʾnānha, Gis nāh (<*ʔa-nahw), cf. Bade nūhw, Migama ʾtnaw, N Dam ʾtnā 'fill', etc.). ◊ o: Had wāʔma // acc. to Saš B 101, = Burji ʾhāṃ-a (adj.), huʔ- (vb.), both <*huʔ-m-; = s: Maʔa hu <*huʔ- or ʾhuʔ-. ◊ r: Dah /ok // a conspicuous lw. with a 'click' (v. HRSC 388; acc. to Bla-Tos, < Sandawe).

33. 'give' ◊ d: Copt ʾt // <ʾdy- (considered an irregular formation from b: Eg rdy Vyc 209); neither = d?: Tum ṭāq <*ṭq- (Boghom takˤ), nor = d: Gwt teh <*ṭeh- (Tsamai ṭeh-), nor = d: Mao ta; the Tum, Gwt and Mao forms are, in their turn, unrel. to each other. ◊ h: Tuar ʾṭk <*ʾṭk // Ahg ḥtk <*Ḥtkf- (Ghadames ḥtkf, Adghaq ḥtkf, Baamrami ḥtkf, etc.) and ṭk <*Ḥtkf- (Semlal, Nefusa, Qabyle ḥtkf) are two different roots at least on the Proto-Berber level. ◊ i: Mnd so // <ʾcay (Musgum sa, Mburku ʾcay-, Miya ṣā) not = i: Siwa uš, Izd š <*Ḥuk, but very likely = n: Arb sīḥis (Hay Arb, sīy Black), Yaaku iseʔe (and Somali sīy) < ECu *sīy- < AA *cayʔ-. ◊ m: Bed nun // (intiyu Bl Ms after Thelwall) likely = p: Ong naʔa, but not = m: Or kēn (a slip?). ◊ q: Shin Chara Hamar im, Dime ʾtim, Male ĩng // all <*tim- (Male <*ting- <*tim-?) = a: Eg ḷm (the common notation is īm; imp.).
34. 'good' ◦ d: Jab ḥar, e: ʾerḥīm // ḥar is a noun 'well-being, good' (JJ 311; not in Bit), ṕerḥīm is 'beautiful' (JJ 210; ‘schön’ in Bit 57), both not sc.; fokšan 'good, helpful, prosperous, (tree) flourishing' (JJ 56, not in Bit) fits better. ◦ g: Tuar īfrar // vb. = a: Eg nfr (vb.) <nfr.Vr. ◦ h: Siwa a-zāfīm // <Arab. ◦ i: Izd rvw // vb. < Arab rayv 'live well', rawiyy- 'abundant' < 'well-watered'. ◦ m: Hs kirkī // 'excellence' (Abr Hs 525), 'uprightness' (Barg 611), not sc.; (dā) kyiū (Abr Hs 602) fits better. ◦ t: Or dánsa // <dan-t- = u: Had deenamo <dan-ano. ◦ x: Dah wine // = Ong wannu 'good (for self)' (Fl Ong 48). ◦ $: Shin šēnga // perhaps = o: Gis medleñ (= mezen) <mV-.SVn.g-.

35. 'green' ◦ j: Hs šādī // 'blue', not sc. with j?: Beḍ sota (sōl/day RBed); kāre is 'green' in Hs (Abr Hs 538; not in Fl) = y: Male karcī <kär-t- (cf. karc, Chara karta 'black'). ◦ m: Bil kutan // qāt-ān RBil, probably = u: Iraqw qansar (qancar MqK 84 < Cu *qan(n)t-ar-, cf. Burunge qaneri 'green', qanča 'unripe, raw', Dah ƙaṭṭe id. HRSC 250). ◦ n: Khmt limlim // a lw. <Eth (Sem: Arab lmn ḍaw. les dattes presque mûres' BK 2 1022, Akk. lammu 'almond tree; sapling' CAD L 68; comp. by L.Kogan). ◦ r: Gwt ilalla // hardly unrel. to p: Arb ḥiliṭi (E. Cu *ṭllah-), though *ṭ is expected to yield Arb ḥ, not ?. ◦ q?: Maṭa // (no term in Fl) -hako HRSC 388, likely = ?: Hamar (no term in Fl) ḫk (Bnd Ar). ◦ q?: Ong // carkamuni, čarka-muni (in Bla Ong 'green, wet' comp., on the one hand, to Ong čarki 'dew', Tsamai čarkē id., and, on the other, to Aun carki 'black', which looks preferable) <čark- or *čark-?

36. 'hair' ◦ b: Akk peertu/šāartu // two different roots: pēr-t- <pāfr-<parf- = c: Copt fīe continuing Dem fš, Oeg fš <fVr (EDE II 564); and šār-tu = b: ArabSyr šafra (SEM *šårf-ra) and g: Izd a-zzar <zHar, all <AA *čfr-. ◦ e: Amh sāgur // tāgur <Cu (cf. Bil šugūr R Bil, Afar ḏagor P-H id.), not sc. with e?: Shin širraa. ◦ o: Aun cicīfi // cicīfī Appl VS, sīsiṭ CR Aw < AA *čićīfī-, cf. Arab ḏīdī 'plait (hair)' and Hs čēfē 'comb (the beard)'; not = o: Bil šibka, Khmt šīvka <čibk-. ◦ p: Or rifēnsa // since Or f continues both *fp and *s(<AA *č), can either = p: Arb ruufan (if- <pfr-only), or, less likely, = p: Yaaku risin (if *ris- <rič-); the latter term, however, is rather <rič-in-<ričʕr (obviously not = Arb ruufan; cf. also Dah rādā-ne 'feather') = q: Had odda <ord- <Cu *srVrVʕr (cf. Kambatta orza-t, Burji orda id.). ◦ k: Gwt kaaso // <gāz- (Tsamai gaz-o), not = k: Hs gāši (gāšā) <gāč; the latter = k: Mnd uğ (ugże, őkšě) <gVo- (otherwise <gła- = Hs gizō 'k. of hair' = Gwt kaaso <gāz-), Gis ĺwič (= Mofu ĺwéč <tan-guVč-).
which, in their turn, hardly = CR Khm 208 while hypothetically, 40. 'heart' either one has nth. in com. w. and (39. 'hear') which is doubtful) which has parallels with no -t com. w. (Hetz) > Ma zaw, Or *sVw- or *sVw.

38. 'head' a: Copt ʒo // continues not a: Eg tp, but s: dʒiː (a slip?). o: Tuar a-gayu // not sc. as not found in the available sources (a-gayu is 'head' in Shilh); ejof is the main Ahg (and other Tuar) term for 'head' = d: Siwa a-hî, lzd ʔiʃ (♚-kafy). o: 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 kî, ko'yî, Migama köyâ, etc.). o: Bed girma // <*gir-m-, nth. in com. w. j: Gwt pukkaː-ate (a slip?), but likely = l: Aun ɲari (Hetz), ngâri (Blâ Ms after Beke) <*tan-gar-? The latter, anyway, has nth. in com. w. l: Or mataʔ and the rel. Cu and Omot terms (a slip?) <*mâth- (PEC), which, in their turn, hardly = l?: Maâa -muːa (acc. to HRSC 387, = Dah ʃanî, which is doubtful) which has parallels with no -t-: Afar amô, amî, Sidamo unô (besides, *t- > Maâa 0 would be difficult to prove).

39. 'hear' c: Izd sfeld // s-fald (caus. s-stem), nth. in com. w. c: Tuar sel (asal) and Siwa sel <Brb *islaw.o: Bed masu // probably = i: Bil was, Khmt waʃ (unless <waʃ, cf. Khamir waʃ/ʃ), which are likely rel. to o: Ong ʔaš and met. rel. to q: Shin šiːa, ši (<<siʔ-/siʔaʔ-; rel. to Ong in Blâ Ong), but either one has nth. in com. w. i: Had. maːčːes. o: Mao kewe // <kêb- (cf. Moča kâbbi, etc.) = l: Gwt kapaːk <(a)b(ak)ap- (cf. Tsamai qəbab-s-).

40. 'heart' o: Tuar ul-ulaw-en, Siwa uli, Izd ul // <wVli(m)- (cf. Kel-Ur ulam), not = a: Eg lb, Akk libbu and the rel. forms <lib- (both have nth. in com. w. a: Tuam twuwar). but = ?: Hamar weylẽm and, more hypothetically, s: Ong laːta. o: Or onneʔ // <wadsn- <wazn- (PEC 20) = m: Had wodâno = i: Khmt iːzeːn (oxân in Appl Khm; however, glossed as 'fegato' in CR Khm 208 while gizû is given for 'heart'), Bil wadaːn, pl. wazan (RBil; not in Fl); all <AA *waʃın/m- (Sem: Arab wadām- 'belly with intestines'). o: Arb zazzâ, Male saaza // <qafzaːf- = n: Gwt safko- <ʃaf- (= Tsamai zaf-kô). o: Maâa ʃawâho // acc. to HRSC 387, swaho; <ʃkawah-, likely = j: Aun ʃaw <ʃVw- or *ʃVw-.
41. 'hom' ◊ a: Mkk ḫopi-só // hardly = a: Eg ḡb (┕-b is expected to yield Mkk ḧb, not p). ◊ i?: Aun ẖēnš // <ṣšarnaššet? Hardly = i: Bil giš (pl. giššik), Khmt źi (pl. źiš) <gīš- (Appl VS); the latter probably = ź: Arb gah-mo, pl. gāḥ (perhaps <gāḥš-); the latter is hardly rel. to j: Or gaā́따, Gwt kaas-kō, Ong gattakko <gaɛ?- (I suppose *-ɛ- because of Or -ɛ-. <-ɛ in other E. Cu and a very tentative assumption that if the Ong example is rel. and not borrowed < Dullay, it is *ɛ more than any other sibilant expected to yield -t(t)- in Ong). ◊ b?: Maṭa ḫālemu, Iraqw ḥarmo // <ẖaad- (acc. to HRSC 256 quoting Maṭa lu-haremū, lu-haremū; for S. Cu *d see ibid. 22) or *ḥar-; anyway, not *kar- (for S. Cu *h and *k see HRSC 26-7), not = b: Akk karn-(a mistake for ḫarn-) and the rel. forms <karn-.

42. T ◊ b: Kiir am // nth. in com. w. b: Jib hai (he, he? JJ). ◊ f: Shin ta/taani, Chara ta/taani, Male tani // <taʔa-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 (ʔata Bla Om), Hamar inta, Beđ ane, Bil an, Khmt Ḥan, Aun an, Or ani, Had ani, Gwt ano, Dah ano, Ani, Iraqw anani, Eg. In-k, Copt anok, Akk anāʔ-ku, Amh ani, ArabSyr ana, Taruk nek, Siwa niš («ni-κ), Izd nekk, Mkk nu-ŋ/nuño, Tumak nā, Hs nānā. ◊ a: Eg. In-k, Copt anok, Akk anāʔ-ku, Taruk nek, Siwa niš, Izd nekk // are rel. by their -k component to e: Ong ka/kāta.

43. 'kill' ◊ Akk b: mqṭ, c: dāku, nēru // three, not two, different roots, of which diāku is the main term for 'kill', nēru 'kill, slay' fits less, while makātu is 'fall down, collapse; attack' (šu-mkttu 'strike, kill in a hunt'), not sc. ◊ f: Amh g-d-l // gāddālu <gdl (Eth and Arab 'to fight'), not = f: ArabSyr qatal <kīlt (cf. Arab gdl 'to fight'; cf. two different roots, *gdl and *kīlt, in Gurgeon LGur 262, 508). ◊ Mkk h: t, k: id // no t- in JMkk and CLR II (probably i-idē CLR II 213 is erroneously separated into two different roots); may rel. to k: Tum aš (if the latter is <aʔad-), but not k: Mnd ḥa (<τaʔaš, not *da), which, in its turn, may = k: Tum aš if <aʔaš and very likely = t: Dah ẓeēd <ζeʔ-ed (caus. of ẓēʔ- 'die') and Ong ẓīʔ (Fl Ong 50), all <AA ẓaʔ- or *z[a]-. ◊ z: Dime dēς, Hamar dees <de·es (caus. of *dē- or *day-‘die’); if d- reflects AA *d-, may rel. to k: Mkk id, if d- reflects AA *d-, may rel. to t: Dah ẓeēd, Ong Ẓiʔ. ◊ p: Arb ḫekēs, igis // if ḫekēs is correct, must be two different roots: ḫekēs- <ṣʔV>V=ys- either = l: Hs kaše (<kah- or, if <ʔek- (caus.). = s: Yaaku gāi (-q’aʔ-), ḫay- and o: Khmt kūw and the rel. Agaw terms <kuw- (very likely rel. to Yaaku); igis Hay Arb 340
44. 'knee' ◊ a: Eg mī s.t, pī d // two different roots: mī:s.t (Med) <*mWILW> rather than <*mVRW>, very likely = g: Gis muluwe; pī:d (Dem) = c: Copt pāt, Tuar a-fud and the rel. terms. ◊ b: Akk birku, Jib berk, ArabSySr rikbi // *birk- and *rikb- 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 // (<*gip-, cf. Migama gippi, Jegu gifo), nor = d: Hs gwiya // (pl., gwō-wā 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 0, the Arb form neither = i: Or žilba, Had gurubbo // (*gulubb-, cf. Sidamo gulube), Gwt kilpay-(ho) // (*gilb-, cf. Tsamai gilib-ko), Dah gillibe // (pl.), gillī (sing.), Ong giliba // (met.), all < AA *gilb-, nor = i: Bil girb // with the rel. Agaw forms and Shin gūbra // (met.) < AA *girb- (to be rather treated separately from AA *gilb-), nor = i: Iraqw gurungura // <*g̣VR(um)g̣Vr- (cf. Alagwa gurunguda, Burunge gurungunda), rel. to Omot: Mocha gur-aṭo, She gur-aṭ; Ch: Kera gāgōr, Sokoro gurungurundu 'knee'; Sem: Arab (dialex.) żar, Eth *ti(n)-gir 'foot' (v. SED I, 9), all < AA *g̣Vr(um)g̣Vr-; whether the latter is rel. to AA *girb- with *-b suffixed is a difficult question.

45. 'know' ◊ b: Eg rīh // hardly = b: Bil arʔ, Gwt ar, Chara ar, Male er <*taʔ- (less probably <*taʔ-), though the reflexes of AA *h in Cu and Omot are not clear), probably including b: Mao ald- // <*taʔ-d-, acc. to Bla Omot 45.1) and i: Had laʔ, poss. <*naʔ-; neither all these forms nor Eg rīh = b: Khmt aarqu <*taʔ- // AA *taʔ- (i.e. Eg 18 Dyn ṭāʔ 'understand'). ◊ f: Amh awk // awaaki <Cu (not. sc.). ◊ h: Mnd diyy // <*diHy- (cf. Zime-Batna dīʔi, Mkk dīqje 'teach'), likely met. rel. to b: Akk wadaaʔ, eduua // (idā and edā are the commonly quoted forms), Jib ędaf // *yaf-. ◊ e: Kiir mam // <*man- (Buli man); nth. in com. w. e: Jib ɣarub (a slip?). ◊ i: Bed kan // likely <*kan- (cf. Somali okōn) = m: Yaaku ġeèno // (qe̓eno? Hei Ya) <*kōn-.

46. 'leaf' ◊ a: Eg jīb // NK db- and Med gībt are the correct forms (<*g̣b or *gbi-). ◊ b: Jib erqet, c: ṭefl // erqêt is 'leaf' in Bit 13 (acc. to Jj 292, ēɾeqt is 'sheet of paper'), an Arabism (not. sc.); ṭefl is 'leaf' in Bit 65, not in Jj; gīb-[at] is 'leaf' in Jj 237 < common MSA *saʃil-[at]. ◊ m: Bil aṣa // = n: Khmt ḥaca // (hāsa Bl Ms after Appl, haqa Bnd LE), Aun ḥacê <*ḥaci-, but not = m?: Gwt aahji-čče <*taki-t-, which is rather rel. to m: Yaaku ėšiʔ // (ččni, pl. ččiʔ Hei Ya;
47. 'lie' ⊂ a: Eg nm // not nn, but nm 'sleep' ('schlafen; im Todesschaf liegen' EG II 266), not sc. as 'lie' with a: ArabSyr nam. ⊂ c: Akk nṭḥ // nāṭu is 'to rest'; nīl- is 'to lie'. ⊂ d: Copt ḥnkt // continues Eg kā-t 'sleep' ('*kā'), nth. in com. w. d?: Or erkaḏu <*hirk-āḏ, but = Ong ḳāda 'sleep, lie' <*ḥāḏ-.

48. 'liver' ⊂ a: Eg māst // (wrong transliteration: s renders z in EG; māz-t and maz-t are the correct forms) undoubtedly = p: Male mayzi <*mayzī- (cf. also Basketo māyiz, Dokka maız); as to p: Mao mēle it may or may not be rel. (<*miż̢/y-? Cf. Mao wāale 'ear' rel. to Male woyzi <*woz-.). ⊂ g: Hs ṣa-hntā (atypical assim. <*ham-t-?), probably = m: Yaakū ahman <*a-hṃ-an. ⊂ ?: Copt ṣuphaṇi // a Bohairic word; no term for 'liver' attested in Sahidic. ⊂ e: Tum telu <*tiḥl- or rather *ṭil- (probably rel. to Sem: *ṭiḥl- ~ *ṭiḥalām- 'spleen' SED 278), not = e?: Or tīrū, Arb tīrā, Gwt tirē, and Maṭa tīlō (tira HRSC, all < AA *ṭir-, with unclear relations to e?): Dime taaRtē (if R renders ṣḥ as in other cases in Fl, *r > Dime ṣ needs to be proved) and Hamar tīrōbō (tirā+hō and tār+hāb, acc. to Bnd Om 213; -hā a fossilized suffix?); the latter is a lw. < Or, acc. to Bnd Om 213. ⊂ l: Ḥad afāre // <*ṭafār- (Had -r- <*ṭ- is regular, cf. Sidamo afalê, Kambatta ḥfâli), hardly = l: Shin ḥafārā, rather <*ḥażār- (Moça ṣārō, Anfillo ḥaīrō). ⊂ ?: Dizi (no term) // bo, bow is the term (in Bla Omot No. 48.5.) rel. to Shako bo 'belly' and NQmot *ḥuṣp- 'chest'; add Sezo bēi 'liver').

49. 'long' ⊂ d: Jib rilm // < Sem *ṛym 'be high, long' (see LGz 478), not = d: Amh raṭṭˁīm convincing, but = g?: Dah rumāṭe
which is not sc. at that as it is an adj. 'm *rum-at- and, probably, g: Ong ḥorma <*Im-rVm- (both have nth. in com. w. g: lzd ḍīf, 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 SOmot root > Tsamai?). ◊ c?: Mkk sōtor // neither =
c: Copt šai continuing Eg Dem hq, ḫūy (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 (šīr R Bil), all < AA *sVTr- having nth. in com. w. e: ArabSyr ṭawīl (a slip?) and not = e: Or ḍērāi, Arb ḍētāi <*der-; the latter not = e: ḫaRuq ṣēr (ṭeER MQK; acc. to HRSC 216, <ṭeEeed-: Burunge ẹdi, Alagwa ẹr), which, in its turn, = ?: Mnd śādē (<ṣadH-) and, very likely, r: Dizi śād-n- is <*ṣad-n-; none of the above = e?: ḫad kērālā (kērālā) <*kērā-. ◊ i: Kiir kāspai // possibly <*kac-n- = o: Mao kwāsā < AA *kac-; ◊ i: Gwt sikāpa // <*ṣiqaB- (Tsamai ẓiqāba), met. rel. to s: Hamar gūdūb, all AA <*g̱izāB- (Sem *g̱izāBvB-: Arab ṣaqbat- 'certain length of a route, distance between two stations', ẓdb 'to pull out' BK 1 268, Jib gūdūb, Mehrī gadūd id. JMhr 115); s: Hamar gūdūb, whatever alike, rather not = s: Dime gudum < AA *gimay < AA *gaimay < Sem: Arab ẓim 's'eloigner, marcher d'un pas large' <*gim) 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 (kameh), Amh kamał (v. SED II, forthcoming). ◊ h: Kiir kwor kwota // lw. (not sc.) < h: ḡs qwarqwaṭā < *qwarqwaṭ-, rather than <*qwarq 'insect'(+*qwar-), which has nth. in com. (a slip?) w. h: ḫad ibibā (a slip?); the latter likely = k: Bil bita <*bi-t-, Khmt bit. ◊ Maṭa n: śo, o: pākāča // not in my sources; gūs is 'louse' in Mein 309 and HRSC 386. ◊ q: Mao kisē, Dime kās, Hamar kasa // very likely = m: Gwt ḥṣgē < *ḥṣg- (Tsamai ʿḥṣg-; unless a lw. < ḫomot or vice versa) < AA *ḥṣ-m- (Sem: Ugaritic kṣm 'grasshopper', Arab kṣām- 'locust', v. SED II). ◊ p: Ong ṣamīṣa // probably met. <*ṣamṣVm- (cf. the -am- suffix in insect names, like in Sem *kṣ-am- above), in which case = r: Shin ṣusu, Chara čučuč, Dizi čučuč; as to r: Male čučuč, it may be a different root as -g̱- is hard to explain (cf., however, Bnd Om 59).

51. man ◊ b: Akk etl-um // rather 'young man'; zikar- is the common term for 'man'. ◊ c: Copt rem // Bohairic rōm-; continues Dem rmt, Eg rmṯ <*RVm or, rather, *RVm, cf. Fayumic lōm-. Nth. in com. w. c?: Beḏ raba, which is not sc. at that as it is an adj. 'männlich' RBed188 (tak is 'man' in Bed). ◊ g?: lzd a-ryaz // <*a-rgaz (Rif a-rgāz, etc.) <*a-rgaṣ; not = g: Tuar a-lās (alas) <*a-halas. Likely met. rel. to p: Aun njirżl (ngārţi Bl Ms after Beke)
52. 'many' ◊ c: Copt emašo // also m-ašo, continues as: Eg fš: 

<<A*frVfr-rr, ◊ h: Siwa kum // unless <Arab kawm- 'heap', likely = v: Dah kářime and, perhaps, h: Maňa kumule (kumire HRSC 246) <<kum-rr-? ◊ i: Izd šigan // <<ki-y-ga-n = g: Tuar a-š-že-n (Agh. as yağgin) <<ya-yy-n and Siwa wašin (not in Fl) <<wa-gyy-n (all < Brb *gay-) = x: Mao gyayyë. ◊ n: Hs yawâ // perhaps = y: Shin ayá. ◊ o: Mnd kwotyja // <<kVfr- (= Jegu kot 'all') hardly = o: Êd gweda-bi, Arb guuddi-da, Ong gedahuni (all <<gVfrd). ◊ q: Bil bayaža, Khmt bižek // Iws. <Eth (LGz 117); garî is the inherited term in Bil (= m: Kiir gâri) and eksät, in Khmt. ◊ s: Or hêdû // likely = p: Gis hada <<hara (*<d- > -d after a laryngeal).

53. 'meat' ◊ a: Eg ëw // met. rel. to o: Iraqw fuñunaai (<fruf; cf. Burunge fuñumay, Asa fuñumay id.). ◊ e: Tuar i-san // pl. of *sa-, most likely < AA *ša- 'large cattle, meat', definitely neither = e: Mkk seši, Kiir có, Mnd čuwa < AA *šew- (AA *š yields Brb *z, not *s), nor = e: Gis ñiše (most likely <<tič-; acc. to Stolb, AA *š yields Gis ž, AA *š yields Gis š, so Gis ñiše is hardly rel. to the Mkk, Kiir and Mnd forms); the latter likely = j: Khmt sîyâa, Aun iši <<iški (acc. to Appl VS, Khmt sîyâa is <<sî, but, together with Aun iši, it is rather <AA *čVfr- ~ *tāw-), Mao oške, Male aški, Dizi ačku, Chara ac [...] (<<č- in Bnd Om 213) = e: Or foni <<so-n- (? <* in Or points to AA *č), Arb so?: none of the forms quoted above = j: Bil ziga (zęgţ, pl. zik RBil, sîhâ Bnd LE) <<sig-, Gwt sakan-ko <<sagan- (Tsamai sagan-ku).

54. 'moon' ◊ b?: Jib ñarat // <<frar-t-, not = b: Akk warušu <<warš-, but = a?: Tuar éor, Izd a-yur <<FrVfrur (hardly = a: Eg frh <<yVfr-, cf. ECu: Rendillé ýeýa id.) <AA *?ar- ~ *ayur-. ◊ q: Kiir pyan // lw., cf. PW Ngritic *-pian- CLR I 119. ◊ g: Bed terég // also terık; as -k/g added to *ter- cannot be explained by any phonetic or morphologic process, rather not cognate to g: Mkk teré, Tum dár, Mnd tre (all <<frVr-), but a lw. <S. Eth *jarak- including Amh čârâk-a id. cog. to Arab ğârik- 'morning star'; either the Beđ or Ch terms have nth. in com. w. g: Gis kîya (said in note 41 to be "scored cognate with Mandara purely on the authority of Jungraithmayr & Ibrizsimow"). ◊ j: Had agâna, Male agâna // one of the forms seems borrowed from the (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 *Hag-Vn- (Burji agun-ţo, Sidamo agana), which may well be <*Hag-Vn-, with -Vn- suffixed = k: Dah hâge (< Cu *hâg-; cf. also Dasenech aqen-ţo id.). ◊ i: Maţa klaţhe // mistaken for mâhe (HRSC 387)? = i: Iraqw sâha-ţw (also rel. ibid.), but not = i: Gwt lefaya and the rel. terms <*li; in Iraqw and Maţa neither s- <*l-, nor -h <*l-. ◊ k: Dizi acim // <*tac-im- (Nao acim; cf. Bnd Om 214); nth. in com. w. k: Dah hâge (a slip?). But likely rel. met. to l: Mao ìaansê and, perhaps, m: Shin aśiśa <*ticic? ◊ i: Ong leţa = i: Gwt lefaya and other Cu // undoubtedly a lw. < Tsamai leţ-o (v. Bla Ong A. 172), not sc.

55. 'mountain' ◊ a?: Tum dâây // <*?day (Ndam dây, Miya day), not = a: Eg dwţw (<gVw or *clVw, but not <*dVw), Copt toow-pî (lōw continuing Eg dâ); likely = z: Dime édo <*adhVw-. ◊ c: Jib giél // giél I] 69 (<*gibl), rather a lw. < Arab than = c: ArabSyr žabal <*gab-al; ħër <*ŷimr- is the inherited Jib term for 'mountain' (not in Bit and Fl), ◊ d: Amh tärara // perhaps <Cu (e.g. Kemant târârâ, Munsiye târra); in any case, neither = d: Tuar and Siwa a-drar (= Chara dera 'mountain', not in Fl), nor = d?: Izd aţari (aţari is correct) <Arab ūsrâl- 'mountain top' (obviously, the Tuar and Siwa terms have nth. in com. w. the Izd one). ◊ g: Hs tudu // 'high ground' (not sc.); dučê is 'mountain; stone'. ◊ n: Arb ītel // nth. in com. w. n: Bil giit pl. (a slip?). ◊ s: Maţa bwţao // likely met. rel. to l: Khmt aba and Bil ambâ (RBil, not in Fl) <*tab-. ◊ t: Hamar duka // acc. to Bnd Om 214, dukâ (assim. <*duk-), very likely = Tuar a-dây' (one of the two main terms for 'mountain' in Ahg; not in Fl) <*daňâš-.

56. 'mouth' ◊ b: ArabSyr tumm <fummm // *>tummm-, not <*fummm- (cf. Jordanian Arabic timm), not = b: Akk pû-, Amh af and the similar terms sc. "b"; probably = j: Had suume (both <AA *tummm-). ◊ d: Tuar e-mi, Izd i-mi, etc. // <*timi or *yVmi (the Anlaut i- is stable: pl. imaw-on) = d: Yaaku mé? and = i: Maţa (mu)-tî if, acc. to HRSC 387, mu- is not a prefix, but, on the contrary, represents a root (in this case, not = i: Arb ðôhô); all these forms rather not = d: Siwa ambu (pl. mbw-aw) <*tə(ə)bVtw, which is probably rel. to e: Hs bâki, Tum bâg, Kiir pyik <*balik-, likely <*bali-k, with a body-part -k suffix (cf. Migama bî, Boolawô bô 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) <*baq- (Tsamai bago). ◊ l: Male dango // not = l: Shin noona, Chara nona.
57. 'name' ◊ a: Eg řn // as there is no known AA cognates, can it be a lw. <NS? Cf. Dinka rin, Moro 伊朗. ◊ b: Siwa smiãt // lw. <Arab, not sc. ◊ c: Or màkã // nth. in com. w. ◊ d: Mnd žîra (zhîrã CLR II; <*zîr, cf. Laamang zârã); a slip? ◊ e: Dah sâre // <Bantu EEN 24; not sc. ◊ f: Ong miša, Dime mizi // rather met. <*sim- than an unrelated root; anyway, Dime -z- <*s needs proof.

58. 'neck' ◊ c: Akk hârur-tu // 'throat', not sc.; kišâd- is 'neck', met. rel. to w: Mao kîdišê. ◊ h: Tuar i-ri // iri <*yiri or *Hîri, not = h? Tum gêr (<*gVr, cf. Sokoto gêrê), but = k: Kiir uyar (acc. to Fl, <*gwar, but this is not so) and, probably, h?: Hs wuyâ, both <*wuyar- (cf. also Jimi yaro, Miya wir, Siri yere, Kulere wur, etc.). ◊ k: Mkk neede // not in Jg Mkk (gôllâ and ḏêrê are given for 'neck'); anyway nth. in com. w. ◊ k: Kiir uyar (a slip?). ◊ n: Bil hâlkum // 'throat' (not sc) and very likely a lw. <Eth (e. g. Tigre hâlkum) <Sem ḫâlkum- 'fauces; Adami's apple' (e. g. Mhr ḫâlkomût, v. SED No. 117); hence, not = n: Arb lûko and Ong luyôma (which are perhaps met. rel. to o: Khmt qâlîmá [CR Khm], qâlma [Appl Khm]); kîrmà (= Ghadames ta-krum-t, Shawi ya ta-krum-t id.) and gûrg 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-gerd, at least on our present level of knowledge, as, on the one hand, the dentals do not yield ð in Agaw and, on the other, no ð nominal suffix is established in Brb (cf., however, Cu-Omot *sin- ~ *sind/- 'nose' below); the latter probably = z: Male korçî and lw?: Hamar korçi (hardly a lw. as Fl suspects; cf. Ari korçi, guîrzi Bnd Om 214), <*&ût Orc, with *k- assim. <*g- under the influence of *-c-?

59. 'new' ◊ b: Akk eššû // = e: Amh addis, both <Sem *ḥadi(š)- <AA *ḥad-is; not = b?: Aun askawi. ◊ h: Mkk dacâlā, Mnd dâwale // <*dawal-, nth. in com. w. ◊ h: Siwa a-trar. ◊ c?: Kiir pyelê // acc. to CLR I 127, a lw. <NS. ◊ k: Gis nawaya // <*nway- ~ *ywîn- (cf. Daba yîwîn), very likely = g: Tuar inai (vb.) <*yîwîy. ◊ n: Khmt aayir // <*hayîr (Waag háîr) = o: Or haaraâ, Arb hârây, Had hârê-čî. ◊ v: Chara meera // probably = a: Eg miwy (if <*mVr; cf. also E. Chad. Migama màràwàt id.).

60. 'night' ◊ b: Akk múšû // = Iraqw amsî? (MQK, not in Fl). ◊ e: Tuar e-ḥêt, Izd id // = f: Siwa daglat (dag-yad is rather 'at night'; it is 'night'), all either <*yîHêt- (then likely = l: Bed hawad <AA *hawad/- or *hawad/-, cf. E. Cu.: Dirayta awawyâd id. and S. Cu: Dah hêdî 'evening') or *bîHàd- (Ghadames īhêè; then <Brb-Ch *bîHàd-: Karekare bêdî, Gude vida, Glavda
61. 'nose' Ə: Eg fnd/fnd // fnd, either <fnVʕf/ʕf- (then rel. to ə: Amh afanča) or *fnVg- (cf. C. Ch: Muktele fng ‘blow one's nose’), then likely met. rel. to h: Bed gūnuf, which hardly = h: Bil kunba, as neither *k- > Bed ġ, nor *b > Bed f). Ə d: Tuar a-nzur // Ahg a-ŋgur <AA *nVjur = d?: Jib nahrer, ArabSyr manhar, but not = d: Siwa tanaz-t, Izd a-nzar <nVzar- (Brb *z may continue AA *ʒ, *c and *č). Ə e: Hs (ha)-nci // hānci, pl. hantuna <ha-n-tun-, not = e: Mkk ʔonde (not in JMkk and CLR II which gives būndi-sō), but rel. to g: Gis ḥutān (cf. also Migama ḥṭīn, Jegu ḥṭēntō, etc.) and probably g: Mnd ātare (<ḥatan- ?). Ə i: Iraqw dūngat // <dung- or *rung-, not *nung- (cf. HRSC 389), not = i: Yaaku nūkā, Maṭa nūṇa, Dime nuku, Hamar nūki <nu(n)-k-. Ə f: Tūmak hun <sun, Kūr (i)-sā, Khmt isṅ, Aun isan, Or funnān, Arb sōnā, Had sanē, Dah sīna, Ong siina, Dizi sīn ~ sīng // all <sbin (only tentatively = f: Gaw sinḍe, Mao śīṅtē, Shin śīṅta, Cha sīnda, Male sīdī, all <sind/t-. As the origin of *d/-t is not clear (another fossilized body-part suffix? a result of some unknown contamination?), Cu-Omot *sind/-t- is probably to be treated as a separate root.

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

63. 'one' Ə a: Eg wF, Copt waʔ, Maṭa wе // <wVr-, perhaps = d: Tuar ien (m.), iet (f.) and other Brb <yaw-nl, possibly <yəw-w, but not = a: ArabSyr wahid, Amh and < Sem *wʔahVd-; the latter likely = h: Ha ḏāyā (cf. Karekare ḏādi, Bachama ḏīdō, Zime-Bata ḏīid, all <Haday ~ *wVHd-) and = a: Yaaku wēhē (wehe, weheṭu Hei Ya), possibly <wVHd-. Ə 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 empēl [CR Aw 143], prob. implying AA *ʔVm-pal-). Ə m: Or tokko, Arb takkā // rel. to t: Dah wālt-ukwe (wattukwe EEN 43). All are compound words consisting of two main components: *f/V- and *-(V)kaw, or *-(V)ke, the first = m?: Gwt tofən (<tVf-, cf. Afar ʔiṣa id.) and the second = a: Iraqw wak and p: Shin ikke (cf. also Afar in-ik, Som kow), Mao īške (<fis-kV); the latter's first component,
64. 'person' a: Eg z/s // z(y), not = a: Mao eesê, Shin ʔašâ, Chara atse (accâ and asâ Bnd Om 92 after Cerulli), Male âsî (*ʔasî-, rel. to Sem *ʔayâš-). d: Jib nafs, e: ensi // both are lws. <Arab, not sc. (besides, ?ensi is an adjective 'human' JJ 4; 'menschlich' acc. to Bit 13). h: Tuar awadem // aw Adêm 'son of Adam', an Arabism (not sc.); yon 'one' <*yaaw-nt (<*yaaw-) is used for 'person' in Agh and other Tuar, likely = t: Yaaku yeʔ and Dime ʔyyî (in this case, also rel. to the terms for 'one'). h: Mkk wêdi-sû // cannot = h: Tuar awadem (see above), but likely = x: Hamar eedi. m: Bed tak // rather 'man', while ha is 'person' (RBed), likely = u: Maša he and Iraqw hee. s: Gwt ʔawho // qawho <*kwâ-ko (Tsamai qau-ko 'man'), not = s: Dah gûho, but probably = o: Aun aqî <*ʔak- (cf. Khmt pl. âk).  

65. 'rain' f: Tuar i-wot // not in my sources; the regular term is a-ʔîwâ <*gVn-. e: Siwa a-nzar, Izd a-nzar // <*-nzar (Brb z may continue AA *-t, *-č and *č), neither = e: ArabSyr matar nor e?: Mkk mizzî (the latter two are neither rel.). l: Bil zuwa, Khmt suwa // <*suaw-, hardly = l: Yaaku sôhô (*-j must not yield ə in Bil and Khmt), but prob. met. rel. to a?: Ong haajje (in fact, harîš, cf. SLLE); the latter is hardly rel. to a: Eg ʔwî-ʔ unless Ong ʒ can reflect *-y(y)- (besides in Ong *h is expected to render ġ not h). g: Hs ruwa-n-samâ // lit. 'water of the sky'; riwâl 'water; rain' = i: Aun ri/eri (őri), Arb ʔiřîî, Gwt irrâwo, Maša re, Dizi iru, Chara ira (also Soqotri riho 'water'), all < AA <*rî-ʔarî-; probably rel. to i: Male ırî (though the origin of -zî attested in Male nouns still needs clarification). p: Iraqw ʔuway // <*tiubay (cf. Alagwa Burunge ʔubay), not = p: Dizi diēb, Dime deebi, Hamar doobi.  

66. 'red' b: Akk ʔamm-n-um // 'oil, fat, cream', probably a slip mistake for ʔâm- 'red'. f: Tuar ihabgayen // Agh <*haaway- (iway 'be red') = g: Siwa azqagay, Izd azuggway (all <*zaawaway) and y: Male zôke (Oyda zôko, Bencho zôko) <AA *ʒ/ʔawâ-. The relation of Male zôke to y: Hamar zia, zo <*ʒ/ʔiway- is problematic as *-l does not seem to yield ə in Hamar; as to y: Chara zuu (or zoʔa), it may continue either <*ʒ/ʔaʔ- or <*ʒ/ʔawâ-. The Hamar (and Charâ?) term may alternatively = h: Mkk têze, likely <*ta-ʔaʔ, and k: Hs ʔjâ <*zaʔ(?) (cf. Jimbin ʔivy, Bokkos ʔawâi 'yellow') and v: Iraqw dafat (likely <*ʒ/ʔawâ-at-).
word, whose first element = k: Hs ŏā, see above) <*āg ani-, likely rel. met. to l: Gis gągəzən <*gə(3/5)gəs=iñ-

67. 'road' ו: #, (Mehri hūrum, Harsusi wōren, Soqotri ūrīm =<*wVm-) = x: Shin wëēnә <*wV- (Kafa wore-tō), generally rel. to Iraqw īrō (not in Fl), all =<*wV-m- (probably also in the bracketed Mkk ūrīz <*ur-si <*ur?. Cf. Biidya ?ōora id.). ג: ArabSyr darb // met. rel. to: G: Tuar a-bərəd, Izd a-brīḍ and, perhaps, k: Kiir lədəp (<*radab-?). ג: Mnd tənggul // irnûγû, not = e: Amh māngād =<*ma-ngad-. ג: p: Bed darab // the inherited terms are lag and sālā. ג: n: Bil dəkʁ // not in the sources available; in PBil 101 means 'vorübərgang, zeitförge' < dəkʁ 'vorüberziehen, vorbeigehe'gug, pl. giγek, and ωa=t, pl. giγz are terms for 'road' in BIL. ג: z: Male goyci, Hamar gòyti // =<*Omot *goy-t- (Anfillo gūtto) =<*go(y)g(a)y- (Ari gōgi) = o: Khmt gug, Had goga, all =<*a *g(5)V(y)(t)- ~ *g(5)V(Y)(g(5))V-y-

68. 'root' ו: Copt nuun-iti // nawne continues Dem mn.t Vyc143, nth. in com. w. either c: Mkk sōtò or c: Or hiddə <*hīnd- (Barana dial. ḥundā), Arb hīzz, Gwt hittə <*hīn3j3- (cf. PEC 20); the latter three have nth. in com. w. Mkk either. ו: Akk šuršu, ArabSyr širš, Amh sar // < Sem *šsrr(š)- = b: Tum hōrōu <sir advocates (Ndām sirāv) <cīrava, Kiir šerī <cēr-, Hs saye <*sal (sāwāwāwā Clark II; rather <*s-ar- <*cār-), Mnd šalwə/talwa (sāllwā) <cēr(w), Gis šāsalək (<*cēr-cēr-ak), all < AA *ēv(5)V(ēr)-, probably = c: Mkk sūtō, likely assim. <*serto (<*cēr-t-); relation to b: Jib sīroh is problematic, as the origin of -j lacks explanation. ג: Neither of the above forms = b: Tuar a-zar / a-sur as Agh a-zar (not a-zar) and a-sur mean 'nerve' (oke is 'root'), or = b: Khmt sur/sir, Aun sirwā, which are lws. < Eth (Aun šēbi is the inherited term for 'root'), or = b: Bil zir; the latter likely = h: Iraqw defar, possibly <*3jVIVr-, and Dah āra 'root' (Bil Ms after Tosco; Fl quotes f: Dah mūrungen, which is a lw. acc. to EEN 39), possibly <*3j3ar- (Iraqw -s- vs. Dah 0 remains unexplained) and probably b: Izd a-zur (if z reflects *-zH-, cf. Iraqw).

69. 'round' ג: #, (spherical or cylindrical) CAD g 51 = g?: Shin gūrə and, perhaps, ג: Ya-aku, if it is gorgorsi? (Hei Ya) <*gogor- (not cognate, if gorgosī? as in Fl,
forms) after Plazikowsky-Brauner; anyway, nth. in com. w. the Eg or Or Kachama Hamar (\[\_*\] 70. 'sand' Ong lacks explanation. the relations between the Ong and Dime words also problematic as in the present case it is qaabaj ma h: Tuar i-kriri, Had kululeta // \(<\kappa^\circ V(r)i\>-\) (Agh keruri means 'être en boule' Fouc 890, not sc.; \(\ddot{g}_a\ddot{a}l\)-at is 'être rond' Fouc 433), neither = g: Yaaku (see above), nor = g: Shin guûra <*>gur, nor = g: Dah kiringerag, a lw. <Bantu (EEN 11), nor = g: Bed kwadad (after Roper and Hudson 1964, not in RBed) as Bed \(d\) is < AA \(\ddot{t}\), not \(\ddot{r}\); the latter is poss. \(<\kappa^\ddot{u}\ddot{a}t\> = b: Copt koote 'to encircle, turn, etc.' (conventionally sc.) continuing Eg \(k\ddot{d}y\) [Vyc 89], poss. \(<\kappa^\circ V\ddot{y}\>\). h: Kir šúwe, Mnd so // nth. in com. w. h: Or nanno (a slip?). \(\ddot{q}\)?: Hs // perhaps kawanya (not quite 'round', but a series of close meanings Abr Hs 508), probably = Had \(\kappa\ddot{u}\ddot{n}\ddot{k}\ddot{a}m\ddot{a}\) (not in Fl; though said to be derived from \(\ddot{k}\ddot{u}\ddot{n}\) 'egg' HEC, formally fits Hs kawanya exactly) <*>kawain(k)-. 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 \(^4\)l, while \(^4\)-r > \(^4\)- 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 atab // Bit 14 (not in JJ); anyway, hardly = b: Gwt taha-kko and Yaaku têchêl, both <*>tahay, as \(^4\ddot{t}\) does not seem to yield \(t\) in Gwt and Yaaku. f: Siwa i\(\ddot{j}\)idi // not in Lao where arramal (<Arab) is given for 'sable' and i-\(\ddot{z}\)di for 'terre'. a: Bed asse // hissay, issa RBed, ha\(\ddot{s}\) Bnd LE (<\h\ddot{V}s>-) = a?: Amh a\(\ddot{s}\)\(\ddot{a}\)\(\ddot{s}\)awa <*>\(\ddot{h}\)\(\ddot{a}\)\(\ddot{s}\)aw- <AA \(\ddot{h}\)\(\ddot{a}\)\(\ddot{s}\)aw- and t: Iraqw hasam <*>\(\ddot{h}\)\(\ddot{a}\)\(\ddot{s}\)- (see MQK 49), but not = a: Eg ñ\(\ddot{y}\), Copt ñ\(\ddot{o}\)-pi. e: Tuar a\(\ddot{m}\)lal // only in Taneslent, another Tuareg language, but not in Agh where e-\(\ddot{d}\)ahi is 'sand'. m: Gis cimiyew // <*>c\(\ddot{e}\)\(\ddot{m}\)\(\ddot{i}\)H-, probably = u: Ong ñ\(\ddot{u}\)maha [FI] (\(\ddot{u}\)maha SLLE, ñ\(\ddot{u}\)maha ST; <*>\(\ddot{c}\)\(\ddot{u}\)m\(\ddot{a}\)H-? Unless <Tsamai ñ\(\ddot{u}\)mah-tu SLLE) = z: Hamar ñ\(\ddot{s}\)ami. v: Chara am\(\ddot{c}\)\(\ddot{a}\) // and ñ\(\ddot{a}\)m\(\ddot{\grave{a}}\) (cf. Bnd 93), likely <*>\(\ddot{a}\)-m\(\ddot{a}\)ns/c-: Kachama m\(\ddot{a}\)nsa, Koyra m\(\ddot{a}\)n\(\ddot{\acute{a}}\), Basketo m\(\ddot{a}\)\(\ddot{\grave{a}}\)nt (met.), perhaps = o: Or ma\(\ddot{a}\)\(\ddot{a}\)nsa, unless the latter is ma\(\ddot{a}\)in-sa <*>man-t- or a lw. <Omot (so Sas Brj 138).

71. 'say' a: Eg jd // j is again inconsistently used for \(\ddot{\j}\) or \(\ddot{d}\) (cf. b: Akk q\(\ddot{a}\)b\(\ddot{a}\)j, where j stands for [\(\ddot{y}\)]; note that Akk kabû is the accepted form); in the present case it is \(\ddot{d}\)l (otherwise \(\ddot{z}\)d) <*>\(\ddot{g}\)\(\ddot{V}\), correctly rel. in Fl to a?: Or \(\ddot{\j}\)\(\ddot{d}\), Arb ged <*>ge\(\ddot{f}\)-, but erroneously to a?: Shin ë\(\ddot{t}\)a/ë\(\ddot{r}\)\(\ddot{a}\) (ët > ër' Bnd Om 172 after Plazikowsky-Brauner; anyway, nth. in com. w. the Eg or Or forms). e: Gwt pay // <*>bay- (Tsamai bey), M\(\ddot{\imath}\)a\(\ddot{a}\) ba? = e?: Gis b\(\ddot{e}\) <*>b\(\ddot{v}\)\(\ddot{\grave{v}}\)- or
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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 quål; a slip?); inni is 'see' = b: Tuar aní. ◊ k: Tum kà, Kiir kwè = k?: Gaw ḥi <*ki?, not = k: Hs ga/ganii. ◊ h: Bil arık // not in my sources; qa العالي is 'see' R Bil (qral- Appl IC) = i: Khmt quål. ◊ h: Bed erh // <?Vrh or, rather, <??Vrh, likely = Copt Sa-hidic ciorḥ, Bohairic īorḥ 'see, look' (not in Fl; hardly <embr with "added", i.e. unmotivated h, as in Vyc 67), cannot = h: Izd raʔa which is a lw. <Arab; neither = h: Or arg, Arb ḥaarg (<*b > g, not h, in Bed), 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 fadàn // Bil Ŧeš-im <*jašj tháng-an (cf. Kemant fàt-an) not rel. to Berb ḥis-. ◊ e: Arb baâdo, e?: Gwt podahÒ, e: Hamar beta, lw: Ong badaho // also bodolo Fl Ong, cf. "Both the Gawwata and Ongota forms are isolated, direction of borrowing is unclear" (Fl note 48). Arb and Gwt (<*badài <*baṭal-) are rather lws. <Omot: Hamar Galila beta, Karo peta (v. Bnd Om 216), Zergulla bičětta (Bla Om), all <POmot *bital-; nth. in com. w. e: Hs iri (a slip?); the latter likely = b?: Chara yr (hardly <*yaʔyr, as *y and ñ seem to yield z, not y in Chara; cf. also Bnd Om 93), not = b: Akk zēr, Amh zär, as for b?: Male zêrci, it is rather a lw. <Amh than an inherited word (cf. Bnd Om 93).

74. 'sit' ◊ g: Tuar raim (an outdated French way of rendering y as z; yawm is the correct form) = i: Siwa Izd qim, all Berb forms <*kaym. ◊ f: Tuar assis // no assis in Tuar or anywhere (a mistake for 'être assis'). ◊ e?: Bil kaf-y // a lw. < Tigrinya ḳaf bâlà (with a safe Sem. etymology: Arab wukf- tapis...pour s'y asseoir', Mehri ša-wukâf 'to lie'). ◊ h: Siwa nan/fâfàn // no nan in my sources; nanfan is an Arabism, not sc. ◊ n: Mnd nʒa // <*nʔa or
75. 'skin' 0 d: Jib gód // <*gīld-, pl. gızhêd, not d: Amh koda, but e: ArabSy r ǧild <*gīld- , and likely g: Mkk golmodo (met. <*gīld-Vm-?). 0 j: Kiir kwaar // either <*kwaHr- (then likely q: Yaaku hreke, with met., and q?: Iraqw kahari) or <*kwaHr- (= Elmolo -progress, poss. <*kũ-att, and Tsamai q̱uro); anyway, not = j?: Gis garak, rather <*gara-k (cf. Sumrai gārē, Ndam gārē). 0 b?: Had omaččo // <*Homad-t, pl. omadda HEC 79, not b: Akk mašku.

76. 'sleep' 0 d: Cop t hinēb // dissim. <hinėm (Bohairic hinīm) = b: Eg nım. 0 Mkk k: môn, j: (tugidē // mōnē (noun), not sc.; (t)ugidē <*ugid-d- likely met. rel. to w: Chara gīţ, Dah gīţ HRSC 388 (not in Fl; <*gīţ-t-?) and Iraqw gūţ-ut (not in Fl, v. below). 0 Arb l: barz, s: kīf // barz is 'pass the night', kīf is 'lie down' (none is sc.); ti_pcm̱ is 'to sleep' likely <*tīn-Vk- = y: Dime nāht <*nāt-t (Cf. Bnd Ar 137-8). 0 t: Had dirir // noun (HEC 136), not sc.; ìnsē-t- is 'to sleep'. 0 lw?: Gaw raf // a common Dullay root (Gollango and Tsamai id.), hardly a lw. (<Or). 0 q: Maṣa saai // HRSC 388 gives -tī for 'sleep'; anyway, saį not = q: Aun saqi-ŋ <*sak- and q?: Dizi sog (even if Dizi -g continues *sgiving), as *sēk or kīlē, not 0, in Maṣa. 0 a: Iraqw qat // 'lie' HRSC and MKQ, not sc. (in any case, not = a: Eg ḫd and Ong kaada, as *-d does not yield -t in Iraqw); gūţ-ut is 'to sleep' in Iraqw (v. above). 0 u: Mao hāl- // nth. in com. w. u: Dah ṣom and Yaaku pôm (a slip?).

77. 'small' 0 e: Amh ṭannoṣ // lw. <Or ṭinnoo-śee, not sc., so cannot = e?: Khmt ṣṭni (Sọọn Bł Ms after Appl), which is met. rel. to Yaaku -dein 'small' (Hei Ya; not in Fl) and Saho Āfar -fwend id. 0 g: Siwa ḥir // no ẓir in my sources; alkik is 'small' in Siwa. 0 n: Gis mecędék // <*m-ṭitik-, likely assim. <AA *dVek- (WCh: Boghom kő-dök, Dwot ndak 'short', Sem *dēk 'be thin,
small', ECu: Somali ḍig- 'become faint, tenuous') = m?: Or diqqa?, Male ḍaka (<ṭak-, with a "shift of emphasis"); neither of the above forms seems rel. to m?: Dime ḍēkk, which, if assim. <ṭigg-, is rel. to h: ḍzd mzy <mV-zig (cf. Zenaga ma-ẓẓūg, Semlal im-ẓig vb.) and p: Bil ṣug/giatan vb.) R Bil (cf. Dembea Qwara ṣeqg) <caq, acc. to Appl VS, prob. further <ṭigw-. (cf. Khamir ḍiqū, assim. <ṭigg-?) < AA *ṭigw- (cf. also Bla Omot No. 78.3), probably met. rel. to n: Arb ṣeqča < AA *seqčila- (NOmot: Ganjule Gidicho Kachama gáči). ∅ q: Aun cili // <cili- (cf. Kunful 艅í, Damot ṣelã), nth. in com. w. q: Ṣon monnuñeni (a slip?), munnuñení ST <mnuñVũ-uni, rel. to j: Tum máñá and j?: Dah ṭààmìna, Mařaŷa ʔini (not in Fl). ∅ o: Had hòffo, o: Bed dabal, o: Male šanši // three different roots having nth. in com. (all slips?). ∅ p: Yaaku niñin, ArabSyr niñina (also = Dasenech ní̂nê, Elmolo niñína) cannot = p: Bil ʔug (a slip?).

78. 'smoke' ∅ d: Jib mándō̄ñ // ma-nâdl (Mehri =nilì), met. rel. to e: ArabSyr duñâh. ∅ a: Tuar a-hu // = f: ḍzd a-ggu (Lzd -gg- is ◂-aww-; Ahg ahu and Lzd aggu as a- is "stable", i.e. not a prefix but part of the root), both ◂Hab or ◂Haw (cf. Ghadames ʔbu); if ◂Haw, perhaps = a?: Mařaŷa (nuu)-ȧu; neither one seems rel. to e: Eg ḡty. ∅ ?f: Bed egā // ◂Vũg, not rel. to f: ḍzd aggu (<gg- ◂-ww), see above). ∅ q: Dah ʔugwgra // acc. to EEN 17 <Khoisan.

79. 'stand' ∅ b: Akk nemed-um? // nemed- 'support' (noun), not sc.; ʔizzuzu is 'to stand'. ∅ c: Jib ʔešš // 'to get up, rise' JJ 17 (sich erheben, auf- stehen' Bit 18), not sc. (therefore, cannot = c: Dizi asaš); sor is 'to stand' (JJ 243; 'stehen' Bit 61), either ◂sör (trans. esbér), or ◂swr, in which case = j: ḍs caya (cayà CLR II) ʕeṣar- (cf. Kirfi ṣarìyo, Siri ñero, Miya şar id.). ∅ g: ḍzd kker // 'rise, sprout' (not sc.); in any case, not = g: Mkk ṭò̀šìra, Tum wóóriwóórit < AA ?Wèst = Had ʔull ◂turr- (cf. HEC; not in Fl giving r: Had ʔišt 'get up', not sc.), Sidamo wurr-, Janjero yèròwa (met.). ∅ s: Gwt sikkar // nth. in. com. w. s: Arb ʔeld/ell (ʔel-d); a slip? ∅ r?: Yaaku ḡah // 'get up', not sc. (no work for 'stand' in Hei Ya). ∅ t: Dah saad // probably a lw. from a Konsoid language (cf. Dirayta soh-α-). ∅ e?: Mařa huma // -tumâ HRSC 388, nth. in. com. w. e: ArabSyr qaf (a slip?). ∅ u: Ong yaw // ◂ywâ (a slip?).
80. 'star' ḏ d?: Tuar a-tri // <*tari (rel. to Chad *tir- 'moon': Jegu tere, Mkk jērē, Bolewa tere, Mnd trē, etc.), prob. to sc. with h: Mnd tre-yokwa; neither ḏ?: Siwa iri (rel. to AA *tiaw- 'moon': Jib tērat, Ahg oér, NMot: Anfillo woro, etc.), nor ḏ?: Hs tawrārā, also tāmrārā (AbrHs 848) <*ta-mrār-, possibly <-*mvr- (neither rel. to Siwa), in which case rel. to e: Mkk mooli-so (also Angas mal-m, etc.). ḏ: Or urī?i // <*wVṛg- or *Hurg-, not = ḏ: Bed hayuk, Arb ḥuzzuk, Gwt hiske, Yaaku hinso? <хи(w)-uk- (cf. PEC 35, 36). ḏ l: Aun biwa // / not = l: Dizi būz, Dime bez (*z > Aun s, not w or 0). ḏ k: Dah lingiilie // a conspicuous Khoisan lw. with a 'click', not sc.

81. 'stone' ḏ a: Eg Ir. Copt ḏoon- // (Bohairic ṭōnī), very likely <*Vnēl-, met. rel. to y: Dizi nyalu and Dime laalo (assim. <*nāl, cf. also Bencho nīl, Nao welu). ḏ d: Amh dāngay // <Or or Agaw (cf. Bil dāŋ*e-ra). ḏ lzd h: i-selli, l: t-aggun-t // both mean 'big stone', not sc.; azur is 'stone'. ḏ n: Bed ṭawē // <*tāb- (cf. Khmt āba, Khamir āba, Bil ambā, Maṭa met. ba:dāo 'mountain') = b: Akk ābu (<*abn- <AA *tab-n). ḏ r: Had kīna // likely <*kīn- (with a full assim. of *-r) = o: Bil krīng, Khmt kerjā, Aun kān (kārmy). ḏ w: Iraqw čašanu, Ong čafa // rather than not rel. to x: Mao sōwē (and janjero šuṭā, Qwadza čaṭ-iko id., all <AA *čaf-), but not to x: Shin šūsa [Fl], šuca [Lmb Sh], šuca [Bnd Om 175] <šult- [ibid.], Chara šuča, Male šuči, all < N. Omot <šult-.

82. 'sun' ḏ a: Copt re/le // Boheirc ré, Sahidic re, Fayumic re, continuing Eg rē, more likely <*lVē < ra?: Iraqw loža <*lof- (counter to HRSC 34, but cf. ibid. 141; rel. to E. Cu *lof- 'moon' PEC, Afar lādī 'day', all <AA *lVē- 'luminous, light', cf. also Sem: Arab laشم- 'mirage in the afternoon heat' and W. Ch: Dafsa-Butura lož 'to break (of day)'); hardly = a?: Hs rana (rel. to Daffo-Butura reēn (mid)day'; in view of no other matches in AA prob. a lw. <NS, e.g. Dagu of Darfur uroñ). ḏ i: Bed yin // a lw. <Kordofanian *nei/*ini cannot be excluded.

83. 'swim' ḏ a?: Jib reh <*rebh // not = a: Eg nby (<*nby or *lby), Copt neēbe. ḏ s: Male cub-e // a lw. (not sc.) <Amh sābh-ātā, borrowed, in its turn, < Ge′ez ṣabhata, sabaya (LGz 547); wayz is the inherited term in Male (Bnd Om 62), likely rel. to m: Arb zawāhād (zaωah-ad Hay Arb) <ɔ*|zuωh- (contra Sas Brj 52, where Arb zaw- <za: <*zaωh-; *k > or -h in Arbore is unusual; cf. also Burji dah-af- <ɔ*|duh-, contra Sas Brj 52 <zaωh-), probably = p: Iraqw yaṭe warhēma (waraḥēm: Bla Ir; comp. ibid. to Alagwa daraḥasu 'fish') <
84. 'tail' ◊ a/b: Amh thresh // lw. < Cu or, less likely, Omot (v. below). ◊ c: Khmt *tērā = m: Bil šemar, Aun camar (*ṭīmar-, met. *ṭīrum-). Had šerimo (*ṭīr-im-, cf. Sidamo čiro) = c?: Chara šeera (Kafa čīrō). Dizi čor-u (čīrū Bla Om), all <AA *ṭīhr- (> Sem *ṭīhr- 'back'). ◊ d: Tuar emellaar, aryal // e-mellaar (*γ is mistaken for r; *ṭīn-law) and a-rγl (γ is mistaken for γ; *rγl) are two different roots. ◊ lw.: Siwa a-mabus // a-ma-*būs Lao; f usually implies an Arabism, but there seems to be no source word in Arab. ◊ h: Kiir kār // kōr <krit- (cf. Tala kīr, etc.) = j: Mnd uktere ◊ lw.: Hamar dubānā // gūl-i is an inherited term = u: Dime golan (also Ari guli Bnd Ar).

85. 'that' ◊ a/b: Bed be-m/be-t // be- is the deictic component, not = a/b: Eg p̱/py/ty/tn (pl.), where f is the deictic component.

86. 'this' ◊ a/b: Copt pai/tai/nai (pl) // ai is the deictic component (<*tāy), not = a/b: Eg pn/p' ytn/nn (pl.), where n is the deictic component in most forms; Eg *n = d: Akk ann-iyum, the correct form being annuv (<*ha-m-a-an) adduced by F1 is 'those'), with -n- as the deictic component pointing to a close object (cf. ulliw 'that') = the n component in e: Jib ḍenu <q-V-nu, b/b: Siwa wan/tan, d: Kiir nāni, Hs nānā, a: Mnd (bo-n)-na, k: Gis hana <ha-na, h/b: Bed un/t-un, d: Bil niin, h: Khmt yen, en, d: Aun ni, v/b: Or kana/tana <*-na, d: Ong ūnda <ūn-da, d: Mao na, k: Shin han <ha-n, o/c: Dizi ṣah/ku-n <*-n-. ◊ f: Amh yih <*zi, d: Bil. ṣah (cf. Harari yi(t)) = h: Tuar wah (<wā-h) and is rather rel. to the h component in g/c: ArabSyur hadā/hādā (<*ha-da), k: Gis hana (<ha-na), Shin han (<ha-n), Chara hānā/hari shā-, n/f: Male haya/hana < ha-. ◊ e: Jib izēnu (pl.) // izēnu is the correct form (Jl 2) <*lā-nu (elyēnu 'diese' Bit 9), likely = m, b: Arb hālō/tālo <*hi-t-alō, -alo being the deictic component.

87. 'thou' ◊ a: Eg nt-k, Copt ntok (both <*n-V-t-k), Akk atta/atti (<*nta-n-t), Amh antā, ArabSyur int, Bil inti = b: Izd kun (<*ku-n), Mkk kēn/kon (<*kV-n), Iraqw kūn/kίn (<*ku/i-n-n) = c: Aun yēn (šnt 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 ?i (m.), ?l (f.), rather not = a: Akk atta/atti, Amh ʔantā, etc.; the latter ones hardly = a: Maṭa āri, as -r- <*-t- in Maṭa needs proof.
88. 'tongue' ◊ c: Tum ḏuţ // <*du-ls- (cf. Somray di-lēsē) <*tu-lis- = a: Akk lišān- and the rel. forms. ◊ e: Mnd aara, Gis Ẓirne // Mnd also nārā CLR II (<*ʔalrm- ~ *nahr-), all <*ʔVnr- ~ *ʔVnr- = j: Dah ʕěēna, likely <*ʔamr- i: Or arraba, Arb ṭērēb, Had ḍallāba, Gwt arrap-(ko), Yaaku ērē ~ ērēp (crep-a is pl. Hei Ya) <*ṭarr-ab- (cf. Dasenech ṭere, pl. ṭerų-u, see PEC 23; cf. also Omot: Shabo aeré), likely rel. to m: Shin albēru, met. <*ʕalām- assim. <*ṭarrab-, and n: Dizi ḏēbil, met. <*ṭalb- (cf. Nao yalb) <*ṭarr(n)b-; all <*ṭarr-ab- ~ *ṭarr-ab- (cf. Saho anrāb), with -b of obscure origin (a fossilized suffix? See next). ◊ f: Bed mida-(b) // also midāl RBed, midālab Bnd LE <*midāl-(ab) (-b may be an objective case suffix or a fossilized suffix) <*mi-ʔ(ʔ)n)d-ala-(ab)- (cf. Qwadza ondalim id. <*ʔand-al-) = j: Maʾa ḏanda (luʔanda HRSC 387), Ong ṭadaba (unless a lw. < Hamar), Dime īdim, Hamar atāp (also ādāb, v. Bnd Om 218), all likely <*ʔand-(alāb)-; on the present level of the AA reconstruction rather to be separated from *ṭarr-ab- ~ *ṭarr-ab- (above), though eventual cognition cannot be ruled out.

89. 'tooth' ◊ d: lzd tu-yēmos-t // nth in com. w. d: Amh ḏars (a slip?). ◊ f: Maʾa ʾiki // ʾiʔke <*ʔik- (cf. Burunge ʾike, Afar ikō), hardly = f: Or ʾilkān (<*ʔilk-), Arb ʾilig (<*ʔilg-), Gwt ilğe (ilğe AMS; <*ʔilk-), all < AA *ʔilg/k-k/, with irregular variations of the third radical (anyway, *l-, even in the -plus velar cluster, is not expected to fall in Maʾa, Burunge and Afar), not rel. to (prob. contaminated with) f: Bed inkē <*Ḥink- (irregular vs. Sidamo hinko <*hink-, both irregular vs. Gollango ʔankō 'molar'), Yaaku ḫnje ni (inje-ni; may be <*ʔiŋng- <*ʔink-), in its turn not rel. to f: Bil eruk (erik R Bil), Khmt iruq (oraтика Appl Khm), Aun irukwi (Damot erqwi) < Agaw *ʔiruk/k-k-. ◊ h: Iraqw śihnō // likely met. <*syn-h- (with the fossilized *h body-part marker?) = b: Akk śīnn- and the rel. forms <AA *sin-.

90. 'tree' ◊ e: Amh zaf // lw. < Agaw, not sc. ◊ h: Siwa ʾaḏbayra // not in my sources; Lao gives tissōzrat < Arab. ◊ k: Mkk ṭāndumū // pl. ṭāndā <*Ḥind- = q: Bed hindī. ◊ t: Gwt ḡargo // karkō AMS <*ḡar- (Tsamai ḡar-ko); if the transcription in AMS, not in Fl, is correct, not = t: Arb koro (<*ʔor-PEC 48), Dah ʾkořo. ◊ q: Ong hanča, iinsē, Mao ʾinā, Dizi inē // also inē (Bnd Om 219) <*Ḥinč- (cf. Gimirra-She inc, enč Bnd Om 176), likely = b: Akk ʾišu <*tiš- < AA *tiš-; neither = q: Bed hindī, nor = q: Shin miṭa, Chara mica, Male mici <*mi(n)i- (cf. Kafa mičo, Zaye sača, etc.) < AA *maγt- (not rel. to q: Bed hindī either): Som *mVy-t- 'branch, rod, stick', Eg mdw 'stick, staff', E. Cu *maγ- 'palm-tree' (Or me티i, Burji ṭayče, Dasenech meṭṭe), C. Ch *mVy-t- 'baobab'.

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91. 'two' ◊ d: Kiir rāp // lw. < Bantu (e.g. Jarawan rzape) CLR I 171; not sc. ◊ e: Hs biyyu, Mnd ba'a // <*bir- or *bil-, presumably lw. < Be-nue-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 lamo, Koyra lamā (comp. in Bla Ong Appendix), likely rel. to h: Mao lombo (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: móþése, d: bōk // bōk is 'go, leave' (not sc. for 'walk, go'). ◊ i: Siwa h // not in my sources; anyway, h implies a lw. < Arab; ukol 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 sôr // sôr/Rézir 'se promener' JMkk (not sc.); tîdi is 'to go' = j: Izd ddu <*Hiddaw (cf. Zenaga edda, Senhaja addu, etc.). ◊ u?: Male ad/ad // rather ad- than ad- (v. Bnd Om 58); in any case, the latter neither = u?: Gwt ačč (also ašš AMS 244) <*tasič, nor u: Arb tîtît- <*tît- (the Gwt and Arb terms are hardly rel. to each other either). ◊ @: Mao hoy? // likely = Iraqw hičić (not in Fl); it is difficult to say whether such phonetically poorly preserved roots as z: Hamar yî and g?: Tum á (acc. to Fl, <ar, but rather <ʔa, cf. Somrai hâ) may be related.

93. 'warm' ◊ Akk c: baḥîr-, d: ḧumt-// baḥr- (not baḥîr-) is 'hot', ḧumt- is 'heat, fever' (not sc.); in any case, not = d: ArabSyr ḥmu which, on the contrary, = Akk emmu- 'warm, hot' (not in Fl) <*ḥmn, 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.; šhán-un is an adj. 'warm' JJ 264. ◊ ?: Mkk // wēlīni JMkk 194 = l: Tum wāy. ◊ h?: Hs zafti // zafti, not = h: ArabSyr daff, as *d cannot yield z in Hs. ◊ n: Mnd ombra // <*ʔa-(m)bVr-, likely = q: Bil bîr, Khmt bērō (bōru vb. Appl Khm). ◊ x: Dah bûgûgû // lw., v. EEN 44.

94. 'water' ◊ d: Mkk ţâţâ // not = d: Bil aqwu, Khmt âqw <ʔakw. ◊ c: Mnd yowe, Gis yam, Beď yam // <*yam- (= Sem *yamun- '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 ʔāmām, Mubi ʔām, C.: Kotoko ṭām, W.: Tal ḥām, Fryer ḥam, etc.). ◊ e: Or bisâni, Arb bîyêçe // <*bič- or *bîk-; acc. to PEC 15, <*bik-ee; a debatable case, probably two different roots, cf. Somali biyo, Rend bičč, Boni biy’o <*SAM *bičč(o) Hei SAM 54, Baiso bek-e,
Dasenech biye (<Or?), Elmoló piče (Hei Elm), Konso piš-a. In any case, nth. in com. w: Tum nám (a slip?). Ḥ: Ong čafawa // čahawu SLLE, rather met. rel. to i: Mao hâče, Shin aassa Fl, ḥācč, aşq [Bnd Om 177], Chara aşa <‘Hauqči’- and likely i?: Male wāći.

95. ‘we’ Ḥ: Mkk kinen/kayen // <*ki-nVn*/kay-Vn; hardly unrel. to a: Izd nukni, Siwa nêni, Izd nukni. Ḥ: Tum di/na // two different roots: di (inclusive), possibly <*ti, perhaps = Ḥ: Iraqw aten and at [MQK 16] <*lat-, while na (exclusive) = a: Eg Ḥn, Akk núnu (<*na-h-n-), etc.

96. ‘what?’ Ḥ: Eg b: In m, d: sī // in m is ‘who?’, not ‘what?’ (not sc. with b: Jib Ḥine); sī is again mistaken for zy. Ḥ: Tuwar aaw // a relative pronoun in Ahg and other Tuar (not sc.); cannot = Ḥ: Copt Ḥu // <*w or *w Vyc 228 and Dime úyúú (wx₀y₀); Ḥ: Siwa tantu // no such word meaning ‘what?’ in my sources (must be a relative pronoun). Ḥ: Bed nān, Ong neenī // rel. by the *n component to a: Akk mínu, Amh man, b: Jib Ḥin, Ḥ: Kiir wun, a: Or maana, ma: Yaaku nīš, Maña ahōni, n: Dizi nakī. Ḥ: k: Bil wura, Khmt wura/wőör-êña // nth. in com. w. k: Mao kōnsiya (a slip?); likely = m: Dizi yiri, which has nth. in com. w. m: Yaaku nūḥ or (d)nyḥt Mei Ya <*-ni-ya-h (a slip?), but probably = o: Hamar Ḥare // nth. in com. w. l: Aun Ḥndarmāi (a slip? Appl IC gives aw(t)- for Aun).


98. ‘who?’ Ḥ: d: Eg sī // zy (cf. z ‘man, person’) = g: Maña Ḥi <*zi, not = g: Gwt yeha, Yaaku Ḥyo, Dime iyay (below); it is hard to say if the Eg and Maña forms are rel. to g: Dah Ḥiko (<*zi-ko or *yi-ko) as Dah Ḥ may continue both *z and *y. Ḥ: e: Tuwar wa // a relative pronoun (not sc.); mi is ‘who?’ . Ḥ: f: Siwa bittin/bāttin, tin // relative pronouns, not sc. Ḥ: g: Gwt Ḥeha, Yaaku Ḥyo, Dime iyay // <*ʔV-yV-V-ha, rather to sc. with e: Aun ay, Had ay, etc. (<*ʔay-). Ḥ: h: Ong Ḥaaḳā, saay // two different roots, cannot have the same score; Ḥaaḳā (<*ha-k-) by its k-component is rel. to g: Dah Ḥiko, i: Mao Ḥiya and j: Shin Ḥone. Ḥ: f: Male oni, Oṛ eenu, čēnu // <*ʔa-w-ni, by their -n-
99. 'woman' ◊ k: Kiir namāsī // rather lw. < Hs namiği. ◊ x: Mnd moksə // muska, múksé CLR II 347 (<mV-gsa) = l: Gis ḥgos (<mV-gos). ◊ g?: Had meentićo // <*man-t-it- <*man-t-í> 'man', not = g: Tuar t-aməṭ (Aḥg t-a-maṭ with "unstable" a-), ızd t-a-maṭ-ut (*t > Had t, not t) and not = g?: IRAQW ameni (Tameeni [Tos Irql]); the IRAQW and BRB forms are not rel. either. ◊ j: Tum deem // probably <tām- (cf. Lele tām) less likely <dVm- (even in this case not = j?: Yaaku ḏamatu or, acc. to Hei Ya, damat'ā <*tam-at- as * t- > Tum t, not d). ◊ r: Dah nata // = o: Or niitiḥ <*nidd- <*niṭ- (cf. Wallaga dial. naďiň, pl. nadd); a lw. into Dah from Or cannot be ruled out. ◊ g?: Chara mašna // <*mas-n, hardly = g?: Had meentićo <*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 máisā, if the notation in Fl is correct; if it is maacā as in LambSh 360, the latter may originate <*ma-t- = g?: Hamar maa <AA *ma- 'mother, woman (cf. also Bed ma? 'women'); if Shin is maaça as in Bnd Om 178, = g: Tuar t-aməṭ, ızd t-a-maṭ-ut and g: Hs màčē (also màt- <*mat-, likely <*ma-t-). ◊ u: Male lali // a reduplicated stem, probably = h: SIWA ta-lītī <*ta-lā/a (Ghadames ta-lta and a-le-t). ◊ g?: Dime ḏamze // dissim. < *?am3/ʃ-, 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 // war- is 'yellow, green' = f: Tuar and ızd a-wray (<war-). ◊ g: Mkk gurus // gurus 'argent (monnaie)' [Mkk 108; ḥōlia is 'yellow' ibid. 73. ◊ h?: Bed ḏādar // ādar/lo 'red' (RBedd); āsfar (ibid.) and kwikumi (Bl Ms after Thellaw) are 'yellow', but both are Arabisms (not sc.) ◊ k: Bil kādara // a lw. < Tigre kādara <Arab (cf. LGz 15); not sc. ◊ n: Arb liywan-da // possibly <lis-fan-; met. rel. to p: Gwt fawlette <*fawel- 'yellow, brown' PEC 46. ◊ Dah q: randzi-nuni // raanşi '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.)


'claw': t: Male ţingo = l: Khmt ţiĉela (<*kicel-), presumably p: Had ţurajka = r: Yaaku segil = j: Gis delek, źelek, źenek (< AA *šunk-al-).


'come': a: Male yē? = a: Eg ēy, Iw, Copt ṣi, Tuar ayu (ēo, imp.), Bed ʔi (also yi?).

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

'drink': n: Male źūke (<*ʔus-k-, cf. Mao ish, Shin uša, Chara uš, etc.), very likely a: Tuar asu, Siwa su, Izd su, Tum ʔē < *ʔsē, Kiir se, Hs šā, Mnd ʔe, Gis źe (< AA *ʔus- ~ *ʔisaw-).

'eat': q: Male wōyzi (also Shin waāţa, etc.) = a: Akk uznu, Jib ʔiđen, ArabSyr udn (< AA *wayʒ- ~ *ʔuŋuŋ-).


'fly': t: Male baran, = t: Amh bārrārā, Bed biriḳ (<*bir-ik?), Khmt bir, Aun berer-ŋ, Or barr-ŋ, Had barar (< AA *br(r)-).

'give': q: Male in (<*ʔin <*ʔim = q: Shin im, Dime ʔim, etc.) = a: Eg (imp.) Imy (< AA *ʔim-).

'good': y: Male kośi = y: Maša kusa, kušo Bla Omot No. 34.3 (< Cu-Omot *kuスマホ).
ани, ArabSyr ana, Tuar nek, Siwa ни (c*ni-k), Izd nekk, Mkk nu-ŋ/nũo, Tumak nā, Hs nūnā.

'know': b: Male er = b: Bil arʔ, Gwt ar, likely = l: Had laʔ- c*raʔ-? (<Cu-Omot *tar- ~ *ra?).

'live': p: Male mayzi = a: Eg məst (wrong transliteration: miz-t and myz-t are correct).

'meat': j: Male aski (c*tuʔ-ki) = j: Khmt siyya, Aun iši = e: Or fōni c*soʔ-n- (f = *s in Or points to AA *c), Arb soł, Gis liše (< AA *CVʔw ~ *tuʔw).

'name': b: Male sun-ci (c*sum-t) = b: Akk šumu, Jib šūm, Amb sam, ArabSyr ism, Tuar i-sam, Izd i-sam, Mkk suma, Tum him, Kiir (wu-sum), Hs suunaa, Gis šint-ed, Beš sam, Bil siŋ (šiŋ), Had summa < AA *(ʔi)-su/int-.

'neck': z: Male korčo (very probably assim. c*guVr-), prob. = j: Izd a-rərd.

'nose': f: Male siiddi (cf. Shin šinša, Dizi sin ~ siŋ), perhaps = f: Khmr atš, Aun ñssān, Or śūnana-n, Arb sōnō, Had sāne, (?) Gwt sinde (acc. to Fl, rel. to Omot; acc. to Bla Omot No. 61.1., borrowed <NOmot, which seems more plausible), Dah sina, Tum hun (<sun), Kiir (ʔ)sá (nyisam).

'rain': i: Male ızzi (<ʔir-zi?), perhaps = i: Aun ričéri (iri), Arb ărriy, Gwt ērra, Maţa re = g: Hs ruwa-n-samā (ruwā 'water; rain') < AA *(ʔi)-ruwa-.

'red': y: Male zostå (cf. Oyda zođo, Bencho zōkâ), undoubtedly = f: Tuar iḥaggayen (<hawaway- <zawawak) = g: Siwa a-zaggay (<zVwawak), Izd azuggway (<AA *3zawak).

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

'say': u: Male geć (Dizi redupl. gę, Dime gęmu <g̥ayH-m-, Hamar gi) = q: Yaaku ohok (okhwi Bla Ms), likely < *tekhi (also Tsamai goha id.) < Cu-Omot *gəhi.

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

'small': m?: Male ḏaka = m? Or dićka? = m: Mnd ţiko (<tič-<tič-), assim. <*dič), likely = n: Gis mečidek (<mV-tičik- <tičik-), assim. <*dičič- < AA *dičak-.

'sun': k: Male abī = k: Aun awa.

'that': x: Male sēk (<sV-k, cf. Shin ēkē, Dizi yēk id.), rel. by its sV-component to p: Or sunī (<su-ṇi, cf. Konso se, Elm asu id.) and to s: Yaaku
se/sa\text{a}; rel. by its -k component to c: Jib dÅskûn, g: Siwa dawok (m.), tatok (f.).

'this': n/f: Male hay/hana, rel. by its h- component to g/c: ArabSyr hÅdÅ/hÅdÅ (<*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-V-k), Akk atta/atti (<*a-n-t*), Amh antâ, ArabSyr int, b: Izd kun (<ku-n), Mkk ken/kon (<kV-n), Iraqw kun/kiñ (<ku/-n*).

'two': h: Male lam\text{a} = h: Bil la\text{a}, Khmt li\text{a}, Aun la\text{a}, Or lama, Arb lamma, Had lamo, Dah l\text{a}.m.

'we': a: Male nuni = a: Be\text{d} hen\text{ên} (hanin*), Bil yin, Khmt yin, Aun no-zî (onnî-ji Hetz*), Or nuu, Arb izon-o-lo, Had nêš (<nV-s), Gwt ine, Yaaku niini\text{ê}, Dah nari, Ma\text{a} nine, Eg Inn, Copt anon, Akk ni\text{n}u (<na-ly-n*), Jib nhan, Amh ân\text{n}a, ArabSyr ni\text{h}na, Tuar nak\text{k}an-id, Siwa ni\text{c}ini, Izd nuk\text{n}i = the n component in b: Mkk kin\text{e}n/kay\text{e}n, c: Tum na, and f: Iraqw at\text{ê}n*.

'white': m?: Male bore = m: Gis babaran (<ba(r)bar- (cf. Mofu mib\text{â}râ, Lele bòrê, etc.).

'who?': f: Male oni (<*a-w-ni*) = f: Or eenu, č\text{ê}n\text{u}, by their -n component rel. to b: Copt nîm, a: Akk mann\text{u}, Jib mun, Amh man, ArabSyr mîn (all four < Sem *nV-n*).

'woman': u: Male lali = h: Siwa ta-lti (<ta-la-t-*, cf. Ghadames ta-lta, walet, al\text{e}t).

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 bidîn-c = Hs hábdî <habdî- or *ha-bdVH- (Ngizim bêbêd, Yedina ba\text{d}ên, Mas bïdû id. CLR 4-5) < AA *bî/ud(-Vn*).

'fat': Male môr-csi (Bnd Om 57 after Siebert; unless a lw. < Or moora or Amh mora), Aun mori, Arb moora = b: Hs may (mâ` oil, fat, grease) Abr Hs 638), likely <mar- (cf. Sura nim\text{û}r, Bata m\text{â}rê, Bachama mare CLR 132-3).

'green': y: Male karci (<kar-t*, cf. Male karc, Chara kart\text{a} `black') = Hs kôrê.

'leaf': Male ʔila\text{s}\text{i} (Bnd Om 59, <*ʔil-a\text{s}\text{i} <*ʔil-? Cf. q: Mao waale <wa\text{d}a-l?), likely = p: Iraqw lofo (met.; cf. also Hebrew yâllâ id.) < AA *yala*.

'mountain': Male ʔu\text{k}a (Bla Omot) = Tuar a-\text{d}a\text{y} (both < AA *du\text{k}ak*).
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'name': lw: Aun **sam** // *šunu* [Appl IC], hardly to score differently from other Agaw (scored **b** in Fl); prob. = Yaaku *iši* Bla Lists (unless a loan <Ma’a).

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

'not' (omitted in Fl): Male **wānte** (Chara *i̞nta*) = q: Gwt **awne**, Yaaku **awn** (unless < Dullay) < Cu-Omot *ʔa-wan*.

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

'small': **m**: Male **dāka** = Akk *dakī*.

'stand': **r**: Male **eč** (Wolayta *ʔek*, etc.) met. rel. to Arb *kē*? (not in Fl; cf. Burjī *kā-ad*, Dasenech *gē*) < Cu-Omot *ʔek*-~*ʔek*.

'swim': Male **wayz** (Bnd Om 62), likely = m: Arb **zawahad** (zawah-ad Hay Arb), poss. = Iraqw *warahem* (~*wuwaḥ* < Cu-Omot *wayaj̃Ṽt̃* ~ *ʕ̃awah*?).

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

'tooth': **j**: Male **ācī** (also *ʔači*, cf. Doko *hāčī* etc. Bnd Om 63; = Aroid *ʔac-i* ibid. 219) = Eg **nh̃-t** <*nuw-hṼt̃* (not in Fl) < AA *ʔačī* (> WCh *ʔācwV* ‘teeth’ Stolb; Sem. *ʔṼt̃* ‘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-Be | 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+), '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+), 'name' (Fl 0, Mil+), 'nose' (Fl+, Mil+ deb), 'rain' |
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(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+), 'T' (Fl-, Mil+), 'meat' (Fl+, Mil+ deb), 'nose' (Fl+, Mil+ deb), 'smal' (Fl+, 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+, 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+, Mil+ deb), 'meat' (Fl+, Mil+), 'small' (Fl+, Mil+), 'that' (Fl 0, Mil+), 'two' (Fl+, Mil+), 'we' (Fl+, Mil+).

**Male-Yaaku** (91; Fl 3 & 1 deb = 3.8%, Mil 6 & 3 deb = 8.2%): 'breast' (Fl+, 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+), 'who?' (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+), 'not' (Fl 0, Mil+), 'rain' (Fl+, Mil+), 'small' (Fl+, Mil+), 'some' (Fl+, Mil+ deb), 'that' (Fl 0, Mil+), 'we' (Fl+, Mil+).

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

**Male-Eg** (96; Fl 2 = 2.1% Mil 6 & 2 deb = 7.3%): 'come' (Fl+, Mil+), 'give' (Fl+, Mil+), 'liver' (Fl+, Mil+), 'sleep' (Fl 0, Mil+ deb), '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+), 'liver' (Fl+, Mil+), 'small' (Fl 0, Mil+), 'that' (Fl+, Mil+), 'we' (Fl+, Mil+), 'who?' (Fl+, Mil+).

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

**Male-Jib** (97; Fl 2 = 2.1%, Mil 5 = 5.1%): 'car' (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+), 'T' (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+), 'T' (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+), 'T' (Fl+, Mil+), 'name' (Fl+, Mil+), 'mountain' (Fl 0, 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+), 'I' (Fl+, Mil+), 'red' (Fl+, Mil+), 'name' (Fl+, Mil+), 'we' (Fl+, Mil+).

Male-Izd (90; Fl 3 = 3.3%, Mil 6 & 2 deb = 7.2%): 'drink' (Fl+, Mil+ deb), 'T' (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 & 2 deb = 6.4%): 'come' (Fl+, Mil+). 'drink' (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+), 'mountain' (Fl 0, Mil+ deb), 'red' (Fl+, Mil+), 'skin' (Fl 0, Mil+ deb), 'this' (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+), 'T' (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+), 'white' (Fl+, Mil+).

As one can see, the average percent of cognates between Male and non-Omotic 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-Omotic 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-Omotic 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-Omotic split; for my percentage, it gives 13,500 BP as a Mid Point, for an Afrasian split, and 13,000, for a Cushitic-Omotic 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 čarka-muni ‘green, wet, green tree’ from Fl Ong 48, čerkamun ‘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 gadaḥ/hune (Fl Ong 42; not in Fl list), gaddahino SLLE (also ‘many’), gadda’uni, pl. gidde’eta ST 117 (also ‘old’) = Dime gad (Bnd Ar 145; not in Fl).

‘bite’: n: Ong gafa = n: Dime gaʔ.

‘breast’: q: Ong ʔāma = q: Dime ʔeme.

‘drink’: m: Ong ʔafaw, likely met. rel. to q: Dime wūʕ (Fl; ʔuʕu Bla Omot <*tuʕ-?}).
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'eye': f: Ong ʔā́fa = f: Dime ā́́ppo ~ ā́ppo.

'hair': u: Ong bine rather than not = z: Dime band-e (<*ban-t-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 <*yʲW-.

'mouth': b: Ong ʔíí fa = b: Dime ʔapf ~ abp.

'name': h: Ong miša likely met. <*sim-, prob. = h: Dime mizi (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 ĝēmu (gee-m(o) Bnd Om 216; cf. u: Hamar ĝi).

'see': n: Ong yop = s: Dime yeeʃ.

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

'tongue': j: Ong ʕadaba, prob. not rel. to, but a lw. from Hamar atā́p, addā (v. Bnd Om 218), then not = j: Dime ʔidim.

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

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

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

'claw': t: Ong ʔόŋke = t: Shin šúŋu-sa.

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

'.eye': f: Ong ʔā́fa = f: Shin ʔawa.

'hear': o: Ong ʔāš, likely met. rel. to q: Shin šiʃa, ši (<*siʔ-/*siʔsaʔ-; rel. to Ong in Bla Ong).

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

'nose': f: Ong siina, perhaps = f: Shin šínta.

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

'water': h: Ong ẓáfawa, likely met. rel. to i: Shin aassa (Fl; ʔaacá, ސa Bnd Om 177; cf. Mao hāčè).

'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: Beđ ʔi.
'give': p: Ong naʔa = m: Bed nun (inīga Bl Ms after Thelwall).
'hand': k: Ong ṃʔa = k: Bed eyi <*?Vy-.
'many': o: Ong geda-huni = o: Bed gweda-bi.
'mouth': b: Ong ŋiʔa = b: Bedyaʃ.
'name': h: Ong miʃa likely met. <*sim-, prob. = b: Beʃim.
'this': d: Ong ŋinda, rel. by its n component to h/b: Bed un/t-un.
'what?': j: Ong neeni = m: Bed nān.

Ong-Bil (76; Fl 3 = 3.9%, Mil 4 & 2 deb = 6.6%):
'bone': e: Ong miča = e: Bil naʃ (naʃ <*naʃ <*maʃ-).
'hear': o: Ong ŋaš = i: Bil wās.
'knee': i: Ong gibile, hardly = i: Bil girb.
'mouth': b: Ong ŋiʃa = b: Bil ab, pl. áʃf.
'name': h: Ong miʃa likely met. <*sim-, prob. = b: Bil siʃ.
'rain': a?: Ong haʃa (haʃa), prob. met. rel. to l: Bil zuwa.
'this': d: Ong ŋinda, rel. by its n component to d: Bil niʃ.

Ong-Had (81; Fl 3 = 3.7%, Mil 3 & 3 deb = 5.5%):
'bite': n: Ong gaʃa = n: Had gaʔm.
'claw': t: Ong soŋke, likely = p: Had ṭuɾaŋka (<*tuɾu(n)kʃ = Sidama čulunk-ičɔ < E. Cu *šV(n)k-Vl-, with metathesis and *i- <*s- by assim. with *-k-).
'knee': i: Ong gibile met. rel. to i: Had guɾubbo <*guɾubb-.
'name': h: Ong miʃa likely met. <*sim-, prob. = b: Had summa.
'nose': f: Ong siʃa = f: Had sanɛ.
'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 moʃo.
'claw': t: Ong soŋke, perhaps = r: Yaaku seqil (<*sVkil, cf. Konso šolokʃok). T: e: Ong kaata <*ka-ta, rel. by the k component to d: Yaaku iĩʃè? (in fact, iĩɛʔ, most probably <*yiko-).
'name': h: Ong miʃa, likely met. <*sim-, prob. = Yaaku iʃi (Bla Lists; not in Fl) <*ʔi-sim-?
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'say': Ong "gis" (SLLE; not in Fl), gis- (ST), very likely <gis-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 (okhui Bla Lists, oko Hei 'speak'), possibly <toghoy-.

'what?': j: Ong neeni = m: Yaaku ňab, (d)inyo (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) <j-v-y-.

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

'bone': e: Ong mičča = e?: Dah mićčo.

dry': p: Ong baša-tuni = p: Dah baʔ-ama (hardly unrel. in spite of Ong -t- vs. DAH -ʔ-).

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

'kill': Ong ǯiʔ (Fl Ong 50; not in Fl) = t: Dah ǯeʔedu <ǯeʔ-ed (caus. of ǯaʔ- 'die').

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

'mouth': b: Ong ?iifa = b: Dah ǯafo.

'nose': f: Ong sìna = f: Dah sìna.


'walk': x: Ong roʔ/rota = x: Dah roʔ/rota.

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

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

'ashes': s: Ong tuuni = a: Eg ãtnw (Med).

'come': a: Ong təe = a: Eg ìyw, ìw.

'fire': o: Ong ǯoŋona (<ǯoŋ-on-) = a: Eg ǯ-þ (Pyr), 'þ-þ (BD-Gr).

'I': e: Ong ka/kátə rel. to a: Eg ënk by the latter's -k component.

'night': a?: Ong fuo (<f-?), hardly rel. to a: Eg wḥ-þ.

'rain': a? Ong haaja, hardly rel. to a: Eg ḥwy-þ (in this case j in Fleming's transcription for Ong conveys ǯ, not y).

'sleep': a: Ong ǯaada = a: Eg ãd.

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

Ong-Akk (60; Fl 3 = 3.7%, Mil 6 & 1 deb = 8.1%):

'big': b: Ong arba = b: Akk rabû.

'I': e: Ong ka/kàta rel. to a: Akk anâku by the latter's -k component.
'mouth': b: Ong ʔīīfa = b: Akk pû.

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

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

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

'what?': j: Ong neeni = a: Akk minu <*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, < *fimm-).

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

'not': Ong ma- = ArabSyr mû.

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

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

'this': d: Ong ũinda, 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 ţatakwida SLLE (not in Fl), rel. by the -kw- component to Jib dšekun.

'this': d: Ong ũinda, rel. by the -n- component to e: Jib dēnu.

'what?': j: Ong neeni = b: Jib ūn.

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

'mouth': b: Ong ţīīfa = b: Amh ʔaf.

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

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

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

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

'cold': c: Ong şanodi, prob. = e: Izdeg a-semmad.

'heart': s: Ong ʔaata (<*lā-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 isam.

'swim': c: Ong šap = e: Izd ššef.
Ong-Hs (81; Fl 2 = 2.5%, Mil 1 & 3 deb = 3.1%):
'breathe': q: Ong ūma, likely = Hs māmā (not in Fl).
'fat': b: Ong mora, rather a lw., not = b: Hs mai.
'name': h: Ong mīsha, likely met. <sim = b: Hs sūnā.
'burn': x: Ong ḫow, ḫoyka, prob. = l: Hs ḫon (= l: Mao ḫiyan), if <AA kīw-an.
'this': d: Ong Ḫinda = d: Hs nnan (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 reli-
able) 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, Bed, 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 cognition again gives a much higher per-
centage: 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, cognition, only one "zero case", between Ong
and Jib, is attested, and there are three cases with 1% cognition: with Ya-
aku, Amh and Izd; the average percent of cognates between Ong and other
Afrasian branches is 3.42. According to my cognition, 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 wāaza = a: Jib Ḫidēn.
'heart': a: Shin nība, likely (if <̃lib-) = a: Jib ub (<̃lib-).
'name': b: Shin šūsā (<̃sum-t-) = b: Jib šum.
'road': x: Shin wēra = d: Jib ṭorm (<̃tur-m.
'that': t: Shin ēkē (ekkew), rel. by the -k- component to c: Jib Ḫikun.
'this': k: Shin han, rel. by the -n- component to e: Jib Ḫenu.
'we': a: Shin nona = a: Jib nhan.
'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 kiyan = l: Hs kóó̱nà.
  'drink': n: Mao ʔiś, likely met. rel. to a: Hs šā.
  'earth': x: Mao kēsē = k: Hs kaasa.
  'this': d: Mao na = d: Hs wannan.
  'woman': g?: Mao múncē (múncē Bla Omot <*munṭ-) = g: Hs màčē
  (also màtā <*mat-, likely <*mat-).

Dime-Copt (98; Fl 3 = 3.1%, Mil 3 & 2 deb = 4.1%):
  'bone': a: Dime ḏûs = a: Copt kas.
  'dry': v: Dime ϕućum (Hamar ϕâčči), likely met. rel. to a: Copt šowe.
  'sand': a: Dime šâyî, likely = a: Copt šō.
  'stone': y: Dime šâyî, likely = a: Copt šô
  'what?': e: Dime úyú = e: Copt ú̱ (,<*wʕ or *ʕw, cf. Vyc 228).

Dime-Izd (91; Fl 3 = 3.3%, Mil 4 & 2 deb = 5.5%):
  'bone': a: Dime ḏûs = a: Izd i-ys.
  'come': l?: Dime ʔâd = h: Izd addu-d.
  'eat': c: Dime ʔiś (<*ʔiś?), likely = c: Izd t-š (t-stem).
  'fly': a: Dime far = a: Izd afru.
  'small': m?: Dime čêk̩ (assim. <*g̩e), prob. = h: Izd mzy (<*mV-zig).
  'that?': e: Dime cana (sânû masc., sânû 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 ʔîft (<*Hi/af-t-) = d: Amh wof (<*Vp-).
  'cold': b: Dime kiž-, kež-in = Amh kāžkəzza (not in Fl).
  'mouth': b: Dime ʔaaf = b: Amh af.

Dime-Hs (99; Fl 2 = 2%, Mil 6 & 2 deb = 7%):
  'ashes': u: Dime bind- (Hamar bidini <AA *bid-n-) = Hs hábdī
  <*ha-bdVH- (not in Fl).
  'bone': a: Dime ḏûs = a: Hs kâsî.
  'breast': q: Dime ʔêmc, prob. = Hs māmâ (not in Fl).
  'ear': g?: Dime ḏâm = h: Hs kunne (<*kum-n-).
  'fat': w: Dime kūstu = k: Hs ʔičê (<*kic-).
  'hand?': i: Dime ʔâne = i: Hs hânnû.
  'red': Dime zu(u) Hay Omot 265, zuu Bnd Ar 156, likely = k: Hs źā.
At 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.1.2. 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.

* * * * *

‘that’; e: Dime cana (sánú masc., sáně fem.), rel. by the -n- component to l: Hs nčan (wančan).
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] (Tigray=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.2.1. 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. *bVr- should be read ‘either *a, *i, or *u’
H renders a non-specified laryngeal or pharyngeal
S renders a non-specified sibilant
/ when separating two symbols means ‘or’, e.g. *?iabar- should be read ‘either *?iabar- or *?abar-’
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() 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 ā is replaced by ã, i by ë.

(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 addad, lw.: Copt lōks.

Abbreviations of languages and language periods:

AA - Afrasian (Afroasiatic, Semito-Hamitic); Ahg - Ahaggar (Tahag-gart); Akk - Akkadian; Amh - Amharic; Arab - Arabic; ArabSyr - Syrian Arabic; Arb - Arbore; Aun - Aungi; BD - Book of the Dead; Bed - Bedaye (Beja); Bil - Bilin; Brb - Berber; C. - Central; Ch - Chadic; Copt - Coptic; Cū - 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]
ʒ - alveolar voiced affricate [dz]
č - palato-alveolar voiceless affricate [tʃ]
ǯ - palato-alveolar voiced affricate [dʒ]
ʂ - hissing emphatic voiceless fricative
č - emphatic voiceless affricate
ẓ - emphatic voiced affricate
č - palato-alveolar emphatic affricate
ʂ - lateral voiceless fricative
č - lateral voiceless affricate
č - lateral emphatic affricate
k, q - emphatic velar stop
γ - uvular voiced fricative (Arabic “ghain”)
ḥ - uvular voiceless fricative
ḥ - uvular voiceless fricative (only in Egyptian)
h - pharyngeal voiceless fricative
h - laryngeal voiceless fricative
y - palatal resonant
Literature

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</thead>
<tbody>
<tr>
<td>Bla Beja</td>
<td>Blažek, V. <em>Beja Historical Phonology: Consonantism</em> (manuscript).</td>
</tr>
<tr>
<td>Bla Das</td>
<td>Blažek, V. <em>Dasanech Language - state-of-the-art</em> (manuscript).</td>
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<td>Code</td>
<td>Author(s)</td>
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<td>Bla Ong</td>
<td>Blažek, V.</td>
</tr>
<tr>
<td>CAD</td>
<td>Oppenheim, L., Reiner, E. &amp; Roth, M. T. (ed.)</td>
</tr>
</tbody>
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CR Aw

CR Khm

Dime Pr

EDE II

EEN

EG

Ehr PA

Faul

Fl
Fleming H. C. *The large Data Base* (computer manuscript).

Fl Ong

Foot

Fouc

Gragg

Grot
Hay Arb

HEC

Hei SAM

Hei Elm

Hei Ya

Hetz

HRSC

Hudson 1964
Hudson R. A. A Dictionary of Beja [Draft printout; prepared by R. Blench], 1996.

Izd
Mercier, H. Vocabulaires et textes berbères dans le dialecte berbère des Ait Izdeg, Rabat: Céré, 1937.

JJ

JMkk

Kane A

KT

Kraft

Lamb-Sot
Lamb Sh

Lao

L Gur

L Gz

Luk Gis

Magh

Mein

MQK

Nak

PEC

RBed

RBil

RKhmr

Roper

Sas Brj

SED I

SED II


