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ADAM MICKIEWICZ UNIVERSITY IN POZNAŃ

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# LINGUA POSNANIENSIS

REVIEW OF GENERAL  
AND COMPARATIVE LINGUISTICS

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POZNAŃSKIE TOWARZYSTWO PRZYJACIÓŁ NAUK  
WYDZIAŁ FILOLOGICZNO-FILOZOFICZNY  
KOMISJA JĘZYKOZNAWCZA  
we współpracy  
z UNIWERSYTETEM IM. ADAMA MICKIEWICZA W POZNANIU

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# LINGUA POSNANIENSIS

CZASOPISMO POŚWIĘCONE JĘZYKOZNAWSTWU  
PORÓWNAWCZEMU I OGÓLNEMU

LXIV (2)



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## TABLE OF CONTENTS

### ARTICLES

|                                                                                                                                                                                           |     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| Jarosław Jakielaszek, <i>Case transmission in Latin control structures: Between syntax and morphology ...</i>                                                                             | 7   |
| David Sandeman, <i>The relationship between the L2 Motivational Self System and attainment .....</i>                                                                                      | 35  |
| Gábor Takács, <i>Angas-Sura etymologies XI .....</i>                                                                                                                                      | 49  |
| Gábor Takács, <i>Mubi-Toram lexicon and Afro-Asiatic III: Lexemes with initial *b- .....</i>                                                                                              | 77  |
| Gábor Takács, <i>New lexical materials for the Proto-Afro-Asiatic anatomical and physiological terminology I: Body part names with initial labials: General terms, head and neck.....</i> | 107 |
| Gábor Takács, <i>Omoti lexicon in its Afro-Asiatic setting VII: Further addenda to Omoti roots with *b- .....</i>                                                                         | 145 |
| Gábor Takács, <i>Semito-Hamitic or Afro-Asiatic consonantism and lexicon: Episodes of a comparative research I (Part 2: Marcel Cohen's Essai comparatif) .....</i>                        | 177 |



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## Case transmission in Classical Latin control structures: Between syntax and morphology

Jarosław Jakielaszek

University of Warsaw

jljakiel@uw.edu.pl | ORCID: 0000-0002-5264-1198

**Abstract:** Jarosław Jakielaszek, *Case transmission in Classical Latin control structures: Between syntax and morphology*. The Poznań Society for the Advancement of Arts and Sciences, PL ISSN 0079-4740, pp. 7-33

Latin nonfinite structures with nonovert subjects exhibit puzzling properties with regard to the case- and  $\phi$ -features of their subjects and their relationship to overt NPs in matrix clauses. While the transmission of case- and  $\phi$ -feature related properties is obligatory when there is a nominative or accusative controller NP, it is only  $\phi$ -feature transmission that remains obligatory when there is a dative controller, case transmission being apparently optional. To avoid an assumption of syntactic optionality, accounts of the phenomenon which rely on syntactic mechanisms propose that the apparent optionality reflects a syntactic difference between two types of nonfinite structures. It is instead proposed that mechanisms of linking of objects via Agree and  $\phi$ -feature and case transmission should be assigned to different components of the grammar, syntax and morphology. The hypothesis allows a unified treatment of the syntactic phenomenon of control in Latin.

**Keywords:** minimalist syntax, Latin syntax, Multiple Agree, control, Case.

### 1. Introduction

#### 1.1. Nonfinite clauses with nonovert subjects in Latin

A significant subset of Latin<sup>1</sup> nonfinite structures consists of structures without an overt subject, with the verb exhibiting infinitival morphology. The class of structures under consideration is heterogeneous with respect to the identity and properties of such nonovert subjects. The morphological richness of nominal inflection in Latin permits to

<sup>1</sup> The discussion to follow is focused on nonfinite structures attested in Classical Latin, i.e. in the period between 90 BCE and 14 CE, with particular attention to the usage of Caesar and Cicero. Non-classical structures, in particular Late Latin developments, are not discussed below. On the periodization of Latin, see e.g. Pinkster (2015: 5-6).

identify several properties of covert subjects of infinitival structures, their featural endowment with regard to case and  $\phi$ -features in particular: although covert themselves, non-overt subjects enter into an agreement relationship with predicatively used noun phrases and adjectives in their clauses, thereby revealing their own featural makeup. While general characteristics of Latin nonfinite structures are well established in these respects, there are phenomena which remain doubtful as far as their proper analysis is concerned; in particular, it remains unclear whether differences in syntactic properties or rather in the application of morphological operations are to be invoked in an explanatory account of their properties. One of the phenomena in question concerns case transmission in control structures in Latin. To consider the behaviour of such nonfinite structures and its possible explanation, we proceed as follows. After an overview of different nonfinite structures with covert subjects in Latin in the remainder of section 1.1, we turn to the transmission of features in control structures in section 1.2, delineating its properties and possible analyses which rely exclusively on syntactic mechanisms. An alternative is then developed in section 2, where an account of the phenomenon of control in terms of Multiple Agree is reviewed in section 2.1, followed by an analysis of the behaviour of P controllers in Latin in sections 2.2 and 2.3. Section 3 closes the discussion with concluding remarks.

To get a bird's eye view of Latin nonfinite structures with covert subjects, consider (1):

- (1) *Cum ... vomere post cenam te*  
 comp vomit.INF.PRS after.PREP dinner.ACC.SG you.ACC.SG

*velle dixisses (...)* *In cubiculo*  
 want.inf.prs say.SBJV.PLQPRF.ACT.2.SG LOC apartment.ABL.SG

*malle dixisti.*  
 prefer.INF.PRS say.IND.PRF.ACT.2.SG

'When ... you expressed a desire to vomit after dinner (...) You said you preferred to retire to your apartment.' (Cic. Dei. 21)<sup>2</sup>

There are three (overt) infinitival structures in (1). The first part contains two of them; in a simplified form (here and thereafter we restrict our analysis to structures as they are created only by indispensable applications of the structure building operation Merge, hence disregarding further rearrangements due to further syntactic operations and discontinuities arising therefrom, since complexities of Latin word order are orthogonal

<sup>2</sup> Unless otherwise noted, the sources for quotations and translations are: Cicero. Pro Milone. In Pisonem. Pro Scauro. Pro Fonteio. Pro Rabirio Postumo. Pro Marcello. Pro Ligario. Pro Rege Deiotaro. Translated by N.H. Watts. Cambridge, MA: Harvard University Press, 1931; Cicero. Tusculan Disputations. Translated by J.E. King. Loeb Classical Library 141. Cambridge, MA: Harvard University Press, 1927; Cicero. Pro Sestio. In Vatinius. Translated by R. Gardner. Cambridge, MA: Harvard University Press, 1958; Cicero. On Ends. Translated by H. Rackham. Cambridge, MA: Harvard University Press, 1914; Cicero. Letters to Atticus, Volume I. Edited and translated by D.R. Shackleton Bailey. Cambridge, MA: Harvard University Press, 1999; Cicero. Pro Caelio. De Provinciis Consularibus. Pro Balbo. Translated by R. Gardner. Cambridge, MA: Harvard University Press, 1958; Caesar. The Gallic War. Translated by H.J. Edwards. Cambridge, MA: Harvard University Press, 1917.

to our present concerns; see e.g. Devine & Stephens (2006, 2019) for recent extensive discussions of the relevant data and their possible analysis covering syntactic properties and the syntax-pragmatics interplay):

(2) dixisses [ <sub>$\alpha$</sub>  *te* <sub>$i$</sub>  velle [ <sub>$\beta$</sub>   $\Delta$  <sub>$i$</sub>  vomere]]

The larger structure labelled  $\alpha$  in (2) is an instance of the accusative and infinitive construction, with the subject NP *te* bearing the accusative case and the verb *velle* being in the infinitive form. As an example without a *pro* subject, consider (3):

(3) *Pherecydes*                      *dixit*                      [ <sub>$\alpha$</sub>  *animos*  
 Pherecydes.NOM.SG say.IND.PRF.ACT.3.SG soul.ACC.PL  
  
*esse*                      *hominum*                      *sempiternos*]  
 be.inf.prs              man.gen.pl              eternal.acc.pl  
 ‘Pherecydes pronounced the souls of men to be eternal.’ (Cic. Tusc. 1.38)

Subjects of such nonfinite structures need not be coreferential with any object in the matrix clause, as exemplified in (3), where the matrix subject *Pherecydes* is disjoint in reference from the subject of the embedded infinitival *animos*. It seems to be established by now that the accusative case assignment (or, in more general terms, Vergnaud-type nominal licensing) in such constructions, discussed in the generative framework since the seminal discussion in Lakoff (1968) (in transformational terms), takes place without an interaction with the matrix verbal complex, thus differing from the ECM type known from English and being possibly due to properties of the C-T complex internal to the accusative and infinitive structure (see e.g. Cecchetto & Oniga (2002), Jøhndal (2012), Danckaert (2016), Lasnik (2019)). The structure labelled  $\beta$ , on the other hand, has a non-overt subject, atheoretically signalled as  $\Delta$  in (2).

Beside the overt-nonovert difference, the subjects of  $\alpha$  and  $\beta$  differ crucially in interpretive conditions imposed on their structural positions: subjects of an accusative and infinitive structure are not dependent with respect to their reference on any other constituent; subjects of structures exemplified by  $\beta$  are obligatorily interpreted as coreferring with the subject of the  $\alpha$  structure, as indicated in (2) with the help of indices. The distinction extends to cover other properties, including tense-related semantic properties of the infinitive (with structures exemplified by  $\beta$  being impoverished interpretively in this regard, with the impoverishment reflected on the morphological side by the fact that only so-called present infinitives are allowed) and the interpretation of the structure as a whole (accusative and infinitive structures being “propositional”, structures as in  $\beta$  being interpreted rather as expressing properties of individuals), and is arguably due to  $\beta$ -like structures being instances of control infinitives with a PRO subject (for an early discussion of control structures and case transmission patterns, see Goggin (1983); for a minimalist analysis, see Cecchetto & Oniga (2002, 2004), Oniga (2014: 290-298) for further discussion and Pinkster (1990: 126-130), Pinkster (2021: 204-220) for a presentation within a functional framework; standard reference grammars of Latin, mostly pre-

dating the investigation of such structures in generative terms, understandably do not follow the distinction in their presentation of the relevant data, see Ernout & Thomas (1964: 321-331), Kühner & Stegmann (1966: 664-721), Hofmann & Szantyr (1972: 341-365), Menge (2012: 663-708)).<sup>3</sup> It may be noted that several verbs, the verb *velle* included, allow both types of structures to be embedded, compare (1) and (4)-(5) (see also Pinkster (2021: 171-172)):

- (4) *Pertinentem*                      *et*              *efficientem*              *sapientiam*  
       leading to an end.ACC.SG    and.PRT    effecting.ACC.SG    wisdom.ACC.SG
- volunt*                                      *esse.*  
       want.IND.PRS.ACT.3PL    be.INF.PRS  
       ‘They want it to be the case that wisdom is both leading to an end and effecting it.’ (Cic. Fin. 3.55)

- (5) *pro volunt* [*sapientiam esse pertinentem et efficientem*]

Whereas *velle* in (1) is an obligatory (subject) control verb, it selects an accusative and infinitive structure in (5), with concomitant change of interpretation of the embedded structure, slight as it is in the case at hand. Disjointness of reference in (5) is a property which excludes a control analysis for the structure; additionally, (5) would admit infinitives expressing different temporal relationships with the matrix event; thus, it would be possible to have not only (5), but also (6) and (7):

- (6) *Pertinentem*                      *et*              *efficientem*              *sapientiam*  
       leading to an end.ACC.SG    and.PRT    effecting.ACC.SG    wisdom.ACC.SG

*volunt*                                      *fuisse.*  
       want.IND.PRS.ACT.3pl    be.INF.PRF  
       ‘They want it to be the case that wisdom was both leading to an end and effecting it.’

- (7) *Pertinentem*                      *et*              *efficientem*              *sapientiam*  
       leading to an end.ACC.SG    and.PRT    effecting.ACC.SG    wisdom.ACC.SG

*volunt*                                      *fore.*  
       want.IND.PRS.ACT.3PL    be.INF.FUT  
       ‘They want it to be the case that wisdom will be both leading to an end and effecting it.’

No such possibilities are available for the embedded infinitival under *velle* in (1), the infinitive being obligatorily the so-called infinitive of the present, and the interpretation obligatorily referring to an event occurring later than the matrix eventuality (i.e. involving an irrealis interpretation). Furthermore, the subject of the relevant structure in (1) is

<sup>3</sup> The development of generative thinking about Latin closely reflects changes in the mainstream generative theory, as well as its place within Latin linguistics in general, gaining more prominence only in the minimalist period; see Mateu & Oniga (2017) for an overview of the generative work on Latin.

obligatorily nonovert under this interpretation: having an overt subject of *vomere* (i.e. *te* again) would immediately lead to a change in interpretation ('you want it to be the case that you vomit') and acceptability of infinitives other than the present infinitive.

Early discussions of infinitival structures within the generative tradition did not always observe the difference between structures like  $\alpha$  and  $\beta$  (witness Pepicello (1977)), but both classes have been distinguished in Latin linguistics since Bolkestein (1976a, 1976b, 1976c, 1979), who capitalizes on different thematic properties of control verbs (assigning a separate  $\theta$ -role to their NP objects) and verbs governing an accusative and infinitive structures (lacking this property) and different interpretive properties coming hand in hand with admissibility of different types of infinitives (see Pinkster (2021: 156-157) for a summary). Despite surface similarity between both types of structures, their distinctness in Latin is not subject to discussion, although details of theoretical accounts understandably vary.

The third infinitival structure in (1) conceals yet another, entirely nonovert one:

(8) dixisti [ $_{\alpha}$   $\Delta_1$  malle  $\Delta_2$ ]

$\Delta_1$  in (8) is the nonovert subject of a structure labelled  $\alpha$ , which is strictly parallel to  $\alpha$  in (2)—an accusative and infinitive structure, and may be thus assumed to be a silent pronominal element *pro* (bearing the accusative case). Such nonovert subjects of accusative and infinitive structures enjoy the same freedom of reference as their overt counterparts do, the appearance of *pro* instead of an overt pronoun being due to discourse-pragmatic factors; in (8) the preceding context fixes interpretive properties of *pro* (see the discussion in Lebreton (1901: 376-378) and Melo (2007: 147-154)). To make the picture of infinitival clauses in (1) complete,  $\Delta_2$  is a nonovert infinitival control structure embedded under *malle*, parallel to the structure embedded under *velle* in (2), of which only the preposed constituent *in cubiculo* 'in your apartment' survived the ellipsis. Alongside with the two types of nonovert subjects of infinitival clauses shown above, viz. PRO subjects in control structures as in  $\beta$  (= CP) of (2) and a *pro* subject of  $\alpha$  (= an accusative and infinitive CP) in (8), there are in Latin structures of the type exemplified in (9):

|                                                             |                   |                        |             |
|-------------------------------------------------------------|-------------------|------------------------|-------------|
| (9) <i>Voluptas</i>                                         | <i>mihi</i>       | <i>videtur</i>         | <i>esse</i> |
| pleasure.NOM.SG                                             | I.DAT             | seem.IND.PRS.PASS.3.sg | be.INF.PRS  |
| <br><i>summum</i>                                           | <br><i>bonum.</i> |                        |             |
| highest.NOM.SG                                              | good.NOM.SG       |                        |             |
| 'The Chief Good in my opinion is pleasure.' (Cic. Fin. 2.2) |                   |                        |             |

The relevant part of the syntactic structure in (9) may be schematized as in (10):

(10) NP<sub>*i*</sub> V [ $_{\alpha}$   $\Delta_i$  INF]

The crucial difference with control structures like  $\beta$  in (2) concerns the lack of thematic role assignment in the matrix in (10), the structure  $\alpha$  being an instance of an



- (12) *Non arbitror* [te<sub>i</sub> velle  
neg think.IND.PRS.PASS.1.SG you.ACC.SG want.INF.PRS.ACT  
[PRO<sub>i</sub> *similem* esse *Epicureorum*  
similar.MASC.ACC.SG be.INF.PRS Epicurean.GEN.PL  
*reliquorum*]]...  
other.GEN.PL  
'I do not imagine that you wish to be like the other Epicureans.' (Cic. ND 1.111)<sup>4</sup>

*Similem* in (12), an adjective used predicatively, is an accusative singular form, much as the controller of PRO, viz. the pronominal accusative *te*, is (see further Cecchetto & Oniga (2004) for a discussion of the importance of such data as counterevidence to the null Case theory of PRO, and Gallego (2011: 338 n.23)). Such relationships may be thus given a schematic representation in (13) (where  $\phi$  stands for the complex of person, number and gender features):

- (13) ... NP<sub>(Case,  $\alpha$ );( $\phi$ ,  $\beta$ )</sub> ... [CP PRO<sub>(Case,  $\alpha$ );( $\phi$ ,  $\beta$ )</sub> ... XP<sub>(Case,  $\alpha$ );( $\phi$ ,  $\beta$ )</sub>]

The pattern in (13) appears to be followed quite consistently in Latin; beside subject and object control with the controllers bearing structural cases accusative or nominative, it is attested also in structures in which there is a controller marked with an oblique case, viz. dative. Consider the following examples:

- (14) *Qui* *sibi* *licere*  
REL.NOM.MASC.SG REFL.DAT.SG be.allowed.INF.PRS.ACT  
  
*vult* *tuto* *esse* *in*  
want.IND.PRS.ACT.3.SG safe.ADV be.INF.PRS.ACT LOC  
  
*foro*...  
forum.ABL.SG  
'Who desires that he may be allowed to appear without danger in the Forum...' (Cic. Sest. 90)
- (15) *Mihi neglegenti* *esse* *non licet*.  
I.DAT negligent.MASC.DAT.SG be.INF.PRS NEG be.allowed.IND.PRS.ACT.3.SG  
'I am in duty bound not to neglect.' (Cic. Att. 1.17.6)

<sup>4</sup> It might be noted that the text has not been transmitted here by our manuscripts unanimously, the codex Nostradamensis having the vocative *Vellei* instead of the infinitive *velle* of the rest of the manuscript tradition, and it was even suggested that the original reading might have been *Vellei, velle* (the error being due to haplography); but the general editorial consensus seems by now to be to adopt the majority reading *velle*. Cicero's *De natura deorum* is quoted according to the edition of Plasberg-Ax (*M. Tulli Ciceronis De natura deorum*, Teubner: Leipzig 1933; the translation comes from *Cicero. The nature of the gods*, Translated by P.G. Walsh, Clarendon Press: Oxford 1997).

- (16) *Licere*                      *illis*                      *incolumibus*                      *per*  
 be.allowed.INF.PRs    they.MASC.DAT.PL    safe.MASC.DAT.PL    PREP
- se*    *ex*                      *hibernis*                      *discedere.*  
 REFL    PREP                      winter.quarters.ABL.PL                      depart.INF.PRS
- ‘They are allowed to depart safe from their winter quarters.’ (Caes. BG 5.41.6)<sup>5</sup>

The verb *licet* ‘to be allowed’ admits a control infinitival clause as its complement, as exemplified in (14) (on properties of *licet* and its kin with regard to complementation and case properties of predicative elements in the complement infinitival, see further the data and discussion in Ernout & Thomas (1964: 132-133), Kühner & Stegmann (1966: 679-680), Hofmann & Szantyr (1972: 349-350), Menge (2012: 695-696)). The controller, *mihi* in (15), appears in the dative case. Its structural position is subject to controversy; it may be hypothesized to be the canonical subject position, *mihi* being an instance of the quirky subject phenomenon (notice the lack of agreement in  $\phi$ -features between *mihi* and *licet*), although this assumption is not essential for the present discussion (the existence of quirky subjects in Latin remains an open research question, see Jøhndal (2012: 23-27) for an argument against their presence and Bardhdal, Cattafi & Bruno (2020) for an opposite view), the crucial point being that the dative controller is able to enter into a syntactic relationship with a local functional head (be it the C-T complex in the case of quirky subjects or the *v* head if the dative remains lower in the verbal phase).

Structures with dative controllers are a rare phenomenon in Latin, verbs selecting a dative object taking regularly a finite complement clause introduced by the complementizer *ut* as the construction equivalent to control infinitival (see Cecchetto & Oniga (2004: 143 n.2) for remarks on this property of Latin); on the other hand, verbs of the “promise”-type (like *promitto*) select for either a direct object NP or an accusative with infinitive structure in the presence of a dative indirect object (hence, not a control structure either). When there is a predicative expression in the control infinitive (*neglegenti* in (15), *incolumibus* in (16)), it bears the dative case, suggesting that case transmission from the controller (*mihi* in (15), *illis* in (16)) took place. No wonder, then, that Latin came to be characterized as a language in which the transmission of case (and concomitantly of  $\phi$ -features) in control structures is obligatory (see Cecchetto & Oniga (2004), Jøhndal (2012: 95), Landau (2013: 107)).

The picture is complicated by the presence of examples like (17) and (18):

- (17) *Civi*                      *Romano*                      *licet*  
 citizen.DAT.SG                      Roman.MASC.DAT.SG                      be.allowed.IND.PRS.3.SG
- esse*                      *Gaditanum.*  
 be.INF.PRS                      Gaditanian.MASC.ACC.SG
- ‘A Roman citizen may become a citizen of Gades.’ (Cic. Balb. 28)

<sup>5</sup> The clause is part of an *oratio obliqua*, the translation has been modified so that it could be clear outside its context.

- (18) *vos*                      *quibus*                      *licet*                      *iam*  
           you.NOM.PL        REL.DAT.PL        be.allowed.IND.PRS.3.SG    already.ADV
- esse*                      *fortunatissimos*  
           be.INF.PRS        happy.MASC.ACC.PL
- ‘You now have the chance of the utmost fortune.’ (Caes. BG 6.35.9)

Such structures (attested, to be noted, in the same authors as structures exemplified in (15) and (16)) do not exhibit case transmission, although there is agreement with regard to  $\phi$ -features between a dative NP in the matrix clause and a predicative element in an infinitival clause. It is to be noted that the lack of case transmission is possible only with dative controllers—nominative and accusative ones transmit their case obligatorily. Relevant properties of such structures may be thus given the following schematic analysis:

- (19) ... NP<sub>(Case,  $\alpha$ );( $\phi$ ,  $\beta$ )</sub> ... [<sub>CP</sub>  $\Delta$ <sub>(Case,  $\gamma$ );( $\phi$ ,  $\beta$ )</sub> ... XP<sub>(Case,  $\gamma$ );( $\phi$ ,  $\beta$ )</sub>]

There are two basic lines along which to approach such structures within a framework which couples operations consisting in establishing a relationship between two or more objects and those involving copying feature values as both syntactic in nature, possibly being only distinct facets of the same syntactic operation. One is to assume that the structure in (13) is the only one available for control structures, hence the pattern in (19) is a schematic representation of a different kind of structure, viz. an accusative and infinitive with  $\Delta = pro$  (not PRO) and predicative elements agreeing with the *pro* subject, which receives the accusative case as every subject of an accusative and infinitive does. This hypothesis is adopted (in passing) in recent research on Latin control structures, see Cecchetto & Oniga (2004: 144 n.2), Jøhndal (2012: 96); let it be noted, incidentally, that it would be probably be the expected way to explain the phenomenon under the movement theory of control of Hornstein (1999) and related work, which dispenses with the notion of a lexical element like PRO entirely, assimilating control structures to raising structures as far as the relationship between the controller and the subject position of the infinitival clause is concerned (though not the only way, since it is possible to introduce chain-splitting mechanisms of the kind contemplated in Lasnik & Uriagereka (2005)).

Although attractive in that it allows maintaining that control structures in Latin uniformly involve both  $\phi$ -feature and case transmission, the hypothesis posits a difference in complement structures where there is no evidence for such except for case transmission properties. In particular, first, in both (15)-(16) and (17)-(18) the infinitival clause has the same interpretive properties; second,  $\Delta$  in (19) is as much obligatorily interpreted as coreferent with the NP controller as PRO in (13) is—in other words, there is no sign of the referential independence characteristic of the subject of an accusative and infinitive structure.

Another way to handle the presence of both (13) and (19) patterns is to follow the lines of the analysis of Icelandic control data in Ussery (2008) and to hypothesize that there is an obligatory direct syntactic Agree relations between the controller and the PRO subject in both cases, thereby accounting for the compulsory nature of agreement with

respect to  $\phi$ -features in both kinds of structures, but also to assume that there is an optional relation of syntactic Agree involving the controller and the PRO subject, the relationship being mediated by a functional head simultaneously probing both the controller and PRO—an instance of Multiple Agree of Hiraiwa (2001, 2005)—and being responsible for case transmission. This approach has as its virtue that it does not assume structural or lexical differences between the infinitival clauses in (13) and (19), both being control CPs with PRO subjects, as expected given their interpretive and morphological makeup. It is possible, furthermore, to justify the obligatoriness of  $\phi$ -feature transmission in control structures and the apparent optionality of case transmission. These virtues come at a cost, though:  $\phi$ -feature dependencies and case-related ones are entirely dissociated; and, unless further provisions are made, it remains unclear why the optionality of case transmission affects only structures with dative controllers, the dependency being obligatorily created when the controller is marked with a structural case.

Both kinds of approach to (13) and (19) have, then, their virtues and drawbacks. An analysis of the phenomenon seems required which would retain the virtues of the alternatives discussed above without incurring problems which they encounter, and thus which would account for (i) the obligatoriness of  $\phi$ -transmission in both (13) and (19); (ii) the obligatoriness of case transmission when the controller is either nominative or accusative; (iii) the apparent optionality of case transmission when the controller is dative, while (iv) maintaining a syntactically uniform nature of (13) and (19), both belonging to the class of control structures, and (v) allowing for the appearance of both (13) and (19) not only synchronically, but in a single idiolect (witness examples from Cicero and Caesar above). The following discussion presents an alternative to an analysis in terms of the standard syntax-centered variant of the PRO theory: section 2 will develop an account which attempts both to provide a unified account of all Latin control structures and to eliminate from the syntactic component sources of linguistic variation, moving them to the morphological component while retaining elements of the standard, PRO-based theory of control.

## 2. Control structures and the division of labour between narrow syntax and morphology

### 2.1. Multiple Agree and Feature Transmission

The principal property of the second of the approaches sketched above worth preserving in developing an alternative analysis seems to be to maintain that both (13) and (19) schematize control structures in Latin, with  $\Delta$  in (19) being PRO. The syntactic underpinning that underlies both interpretive properties of control structures and their morphological shape,  $\phi$ -feature agreement and case transmission in particular, should be then common to both (13) and (19). An analysis utilizing the mechanism of Multiple Agree, understood as an operation which relates a syntactic item (a probe) bearing unvalued features to more than one syntactic objects bearing requisite features simultaneously (see Hiraiwa (2001, 2005), Anagnostopoulou (2005), Nevins (2007, 2011)), seems to be an

appropriate direction. Multiple Agree itself is a mechanism independently postulated to account for various syntactic phenomena, hence not a device introduced *ad hoc*. Instead of restricting its theoretical import to the case transmission phenomenon, however, it might be promising to exploit its potential to account for syntactic relationships in control structures in general; see, in particular, Gallego (2011) for this way of approaching syntactic control (with an extensive comparison of the Multiple Agree theory of control with its main competitors, viz. the movement theory of control and the classic GB theory, is presented), building upon the proposal to analyze binding-theoretic relations in terms of Multiple Agree in Gallego (2010).

Consider first the following schematic representation:

$$(20) \quad [_{XP} X_{(F, \emptyset)} \dots [YP_{(F, a)} \dots [ZP_{(F, a)} \dots ]]]$$

When a probe  $X$  with an unvalued feature  $F$  is merged into a syntactic structure (on the assumptions of recent developments of the minimalist framework in Chomsky (2013, 2015b, 2020),  $X$  is a phasal head, distinguished by hosting unvalued features) and syntactic operations at the phase level take place, the operation Agree operates under minimal search, establishing a relation between a probe and a goal—a syntactic object hosting a matching valued occurrence of the feature  $F$ ; in (20), the relationship in question may be established simultaneously with both  $YP$  and  $ZP$ , being an application of the operation Multiple Agree, which subsequently involves copying of feature values found under minimal search. The pattern seen in (20) may be found in control structures, with  $X = v$  in object control and  $X = C$  in subject control cases, and  $YP$  being the controller NP. As for  $ZP$ , it is arguably = PRO, although it does not seem warranted to suppose that it hosts an unvalued occurrence of the  $\phi$ -feature complex; suppose tentatively that it is radically underspecified. Following the line of research which proposes a close similarity in featural specification between SE-type anaphors and PRO, contemplated briefly for the Latin case in Cecchetto & Oniga (2004: 147) suppose that both classes of objects lack  $\phi$ -features entirely (see Burzio (1986, 1991) and cp. Raposo & Uriagereka (1996)), bearing merely the categorial specification [+N] (the alternative, which is to take PRO to be specified [Person], as in Gallego (2011), would either incur difficulties with differentiating the underspecified nature of PRO and bearing unvalued [Person] feature or would incur the risk of leading to the idea that PRO bears a 3rd person specification in all configurations, contrary to facts; see also Gallego (2010: 175 n.8) for some comments in the context of binding theory for anaphors). Anticipating partly the discussion in section 2.3 regarding the mechanics of the syntactic operation Agree-Link, let it be already remarked that the following discussion leads into a specific direction with respect to features involved in this operation as well as the mechanism which makes syntactic objects visible and accessible for Agree. The standard view of the operation Agree takes it to rely on the procedure of minimal search for specific features—in the domain of A-relations,  $\phi$ -features—so as to establish an appropriately local relationship between an unvalued occurrence thereof and a valued one, the search being initiated by the presence of unvalued features (whence the probe-goal metaphor, which captures the initiating role of unvalued features and the direction of the information flow; see however the reserva-

tions in Chomsky (2015a: 81)). Instead of the search for  $\phi$ -features, we propose that the search in question, initiated by the presence of an unvalued occurrence of  $\phi$ -features, involves merely the search for the categorial [+N] specification so as to establish a local relationship between the former and an occurrence of the latter. The output of the operation Agree-Link will serve subsequently as the input to the morphological operation Agree-Copy, which, on the basis of the pointer inserted by the operation Agree-Link, accesses the morpheme bearing the [+N] specification and copies its  $\phi$ -feature specification so as to value the unvalued occurrence of  $\phi$ -features (constituting a bundle, but valued simultaneously).

Keeping to the syntactic operation Agree in a more standard setting for the time being, it would operate in a structure along the lines of (21) in search for relevant occurrence(s) of features (we represent  $\phi$ -features as a single attribute-value pair for legibility), leading to a valuation subsequently to establishment of  $\phi$ -N relationship, if possible (i.e. if items bearing [+N] specification either have specified  $\phi$ -features or lack them entirely).

$$(21) \quad [_{XP} X_{\dots(\phi, \emptyset)\dots} \dots [YP_{\dots N\dots} \dots [_{CP} PRO_N \dots]]]$$

The ultimate output of Multiple Agree with regard to  $\phi$ -features would be therefore as in (22):

$$(22) \quad [_{XP} X_{\dots(\phi, a)\dots} \dots [YP_{\dots N,(\phi, a)\dots} \dots [_{CP} PRO_{\dots N,(\phi, a)\dots} \dots]]]$$

An account of control phenomena which relies exclusively on syntactic operations should assume that as a reflex of the  $\phi$ -feature relationship, Case is assigned to both goals in (21) simultaneously, with the X phase head receiving the feature values as determined by the featural makeup of YP (the controller); in the case of subject control, this is the standard relationship between C and the NP subject (before the process of Feature Inheritance, lowering the  $\phi$ -feature occurrence from C to T, occurs; see already Chomsky (2007, 2008) on Feature Inheritance within the theory of phases), in the case of object control the relationship is established between the phasal head *v* and the object NP (again before Feature Inheritance takes place). The X-head, be it C or *v*, on the other hand, would be assumed to act as a mediator in the dependency between the controller and PRO, a process of Feature Transmission, acting parasitically on the Multiple Agree operation, enriching the bare [+N] specification of PRO with the full  $\phi$ -feature specification provided by the NP controller. The process of Feature Transmission operating along such lines was proposed for a wide range of structures in Kratzer (2009) (where, however, a feature unification mechanism instead of feature copying is adopted, and a local C head is involved in determining properties of PRO; see also Landau (2015) for a theory on which local C heads play a crucial role in establishing relationships relevant for at least a part of control configurations).

There are two issues that an account of Latin control structures along such lines has to face. First, in a framework which exploits the concept of a derivation proceeding by chunks of syntactic structure, thereby accounting for cyclicity effects and restrictions on the application of syntactic operations, it is to be explained why a control CP in (21)

does not constitute a boundary which would make it impenetrable for operations attempting to reach the PRO subject from the outside, while CPs are standardly assumed to be domains for cyclic applications of syntactic operations, with the Phase Impenetrability Condition forbidding later access to the domain of a phasal head: “the cycle is so strict that operations cannot “look into” a phase  $\alpha$  below its head H” (Chomsky 2000: 108) (see also Chomsky (2008: 143); note that this is the “strong” version of the Phase Impenetrability Condition, as opposed to the “weak” version of Chomsky (2001, 2004)). One route might possibly lead through weakening the phasal status of control CPs, which might be due to the C-T complex head being created before the structure building operation Merge integrates it into the structure (which would be a phase cancellation effect along the lines of Epstein, Kitahara & Seely (2016)) or T-to-C raising before operations at the phase level begin to take place (which would be a de-phasing effect of “head hiding” along the lines of Blümel and Goto (2019)); yet another possibility might be to reconsider the determination of the phasal status of a syntactic object entirely and employ a convergence-based approach to phases (which in this case might probably lead to the non-phasal status of the CP as a result of the underspecified nature of PRO; see Grano and Lasnik (2018) on neutralization of phasal boundaries in the context of bound pronouns). Another route, one which would not involve tampering with the general properties of the derivational structure building procedure (although prospects for analyses along such lines and their consequences may be worth exploring in themselves), might pertain to the division of labour between syntax and the morphological component.

Before turning to a possible alternative characterization of the operation Agree and processes involving case and  $\phi$ -feature values in section 2.2, let the second issue be also signalled. The empirical coverage of the analysis is so far not sufficient to count as an explanation of the existence of the patterns in (13) and (19), being restricted to those instances of (13) in which the NP controller is assigned a structural case (nominative in subject control and accusative in object control cases). It is in such instances that the operation Agree as standardly conceived, acting upon a structure with properties delineated in (21), is able (i) to have the  $\phi$ -featural specification copied from the NP controller (witness  $\phi$ -feature agreement with nominative subjects), and simultaneously (ii) to assign the relevant Case to both the controller NP and the PRO subject. Dative controllers, given their inability to agree in  $\phi$ -features with the verb, remain unaccounted for, as much as the existence of the pattern in (19) does. After reconsidering the character of the operation Agree and related properties of syntactic objects, it is therefore necessary to widen the coverage of the data in section 2.3.

## 2.2. Linking in syntax, copying in morphology

The Phase Impenetrability Condition together with the phasal character of the control CP are not compatible with the understanding of the workings of the operation Agree as assumed in the framework of Chomsky (2000) and related work. An operation comprising the minimal search procedure to find relevant features and subsequently changing featural specification of syntactic objects will be sufficiently local as far as the relation-

ship between a phasal head and an NP controller in (21) is concerned, but it would also have to cross a phase boundary to reach the PRO subject, affecting it subsequently in endowing it with the  $\phi$ -feature content provided by the phasal head agreeing with the controller (a predicative element in the control clause will undergo featural change as well in virtue of agreeing with the PRO subject, with which it presumably originally stands in a small clause configuration). The PIC may be understood, however, as a condition preventing changes in both structure and featural content of an already transferred domain of a phase head while allowing establishing an Agree-based relation between a probe and a goal as long as changes affect exclusively the current phasal cycle—in the case at hand, any changes should then affect only X in (21) (see e.g. Chomsky, Ott & Gallego (2019: 241) for this understanding of the PIC). This suggests that a division of labour between the syntactic part of the operation Agree and the post-syntactic part thereof may be a suitable solution of the problem of phase impenetrability. The idea that there is a distinction between a strictly syntactic operation belonging to the realm of narrow syntax, establishing only a link between probes and their goals, and a post-syntactic operation which effects copying of relevant feature values, has been explored in various directions e.g. in Arregi & Nevins (2012), Chung (2012), Marušić, Nevins & Badecker (2015), Bhatt & Walkow (2013), Atlamaz & Baker (2018), Atlamaz (2019), Kalin (2020) a.o.

Following the proposal in Atlamaz & Baker (2018), Atlamaz (2019), suppose that the narrow syntax operation Agree-Link establishes the relation between a probe, bearing unvalued feature(s), and a goal, bearing relevant features (in the Multiple Agree case, there are several goals), and—instead of copying feature values—inserts pointers to syntactic objects bearing requisite valued features. The output of Multiple Agree-Link applying to the structure in (21) would be then as in (23):

$$(23) \quad [_{XP} \ X \dots \langle \langle \phi, \emptyset \rangle, \langle \rightarrow Y \ P, \rightarrow PRO \rangle \rangle \dots \dots [ \ YP \dots N \dots \dots [_{CP} \ PRO_N \dots \dots ] ] ]$$

The details of a specific implementation are not as important for the present discussion as general properties of the operation with the output in (23) are. First, only the probe (X in (23)) undergoes any changes during the workings of the Agree-Link operation; the PRO subject, in particular, remains unaffected by the operation belonging to narrow syntax.

Agree-Link, despite reaching as far as the subject position of an embedded CP phase, remains therefore compatible with the understanding of the Phase Impenetrability Condition delineated above, viz. as a condition which permits long-distance dependencies across phases as long as only the probe present in the current cycle is affected by an operation (obeying, obviously, also such rules as the principle of minimal computation). Second, the identity of both goals is recorded on the probe—in the specific execution of this idea in the representation in (23), as an ordered tuple of pointers. A relationship between YP and PRO is thereby created which, given the featural makeup of both syntactic objects, the defective nature of PRO in particular, is a dependency relation of PRO on its controller. No further operations need be assumed for the interpretive component to handle this relationship when the structure is ultimately transferred to the interfaces;

in particular, no operations of feature copying are required for the semantic properties of a control structure to arise as a consequence of (23) being delivered to the conceptual-intentional interface. Third, as a consequence of leaving (Multiple) Agree-Link as the syntactic part of the Agree-complex, operations involving  $\phi$ -feature values are removed from narrow syntax and assigned a place in the post-syntactic morphological component as much as the operation of case assignment is, following much recent work on the syntax-morphology relationship (as in Bobaljik (2008) and related work, building upon ideas going back to the proposal in Marantz (1992)). In particular, nominal licensing is dissociated from morphological case assignment, the latter being operative at a post-syntactic stage of a derivation. On the picture delineated here, it is the result of m-case assignment that is relevant for patterns schematized in (13) and (19): rather than the abstract Case, a feature present in narrow syntax, being valued during the derivational process in narrow syntax, it is a morphological case value that is assigned (and transmitted) in control structures in a morphological component, in accord with the basic idea of Marantz (1992), Bobaljik (2008), Sigurdsson (2009), a.o.

Once the structure along the lines of (23) is therefore handed over from narrow syntax to the morphological component, there are several operations waiting to be performed on it, including in particular Agree-Copy (the morphological part of the former syntactic operation Agree), which replaces pointers in (23) with the  $\phi$ -feature set of the controller NP; morphological case assignment, which inserts m-case features into NPs; Feature Transmission, which, modified in an appropriate way, has to follow other operations on  $\phi$ -features and be transferred to the morphological component; as well as familiar operations like Fusion, Linearization and Vocabulary Insertion (adopting a Distributed Morphology framework as the point of reference; see Embick & Noyer (2007) for an overview).

Operations like Agree-Copy, m-case assignment and Feature Transmission may be reasonably suggested to occur at an early stage of post-syntactic derivation: m-case assignment, in particular, is sensitive to structural properties of the syntactic object transferred to the morphological component, hence it must take place before Linearization and Vocabulary Insertion apply. The operation of Feature Transmission itself, although it may be assumed to apply basically along the lines of Kratzer (2009), may need a reconceptualization which would follow the route of the reconceptualization of the operation Agree, viz. it may be illuminating to take it to involve two components: Feature Transmission-Link and Feature Transmission-Copy, both belonging to the morphological component (in contrast to the pair Agree-Link and Agree-Copy, only the latter of which belongs to morphology). The former establishes the link between syntactic objects taking as its input a pair of objects indicated by the ordered tuple of pointers in (23); in other words, it is the output of Multiple Agree-Link that provides a specification of objects entering into a dependency and subject to the operation of Feature Transmission-Link. It may be observed that there is nothing more to the phase head being a mediator in establishing the relationship in question; in particular,  $\phi$ -features are not copied onto the PRO subject from X in (23), and the relationship between the controller NP and the PRO subject becomes independent of the Multiple Agree configuration once Feature Transmission-Link enters into play. The other part of the Feature Transmission complex, Feature Transmission-Copy, would on this approach consist in copying both  $\phi$ -features and m-case

features from the controller NP to the PRO subject insofar as possible; in other words, the operation would result in transmitting as much of the relevant featural specification as possible (note that in the control case, the copying operation involves not merely feature value copying, but rather copying of the entire attribute-value specification). The operation Feature Transmission, operating on the basis of the relationships established by the operation Agree, may be hypothesized to take the output of the operation Agree-Link as its input.

The Feature Transmission-Link operation, in particular, takes the output of Agree-Link and prepares it for an actual “transmission” of features in that it provides a link between an output of the search for specific features located at both syntactic objects (the controller and PRO in the case at hand). Suppose that Agree-Link has provided as its output an ordered triple  $\langle X_{\langle\langle\phi, \emptyset\rangle, \langle\rightarrow Y P, \rightarrow PRO\rangle\rangle}, \langle YP_N, PRO_N \rangle \rangle$ . The operation Agree-Copy proceeds then to unifying the contents of the N-bearing morphemes at both goals with the morpheme bearing unvalued  $\phi$ -features of the probe via copying. Feature Transmission-Link, on the other hand, will perform a search procedure over both objects, searching for  $\phi$ -feature and case bundles so as to locate their occurrences; in the most straightforward case, it will then give as its output an ordered pair  $\langle Y_{\langle\langle\phi, \alpha\rangle, \langle CASE, \beta \rangle\rangle}, PRO_{\emptyset} \rangle$ , followed by Feature Transmission-Copy copying relevant feature bundles. As the operations of feature transmission involve more steps, including a search over both YP and PRO, their scope extends beyond the domain accessible for the Agree-Copy operation, reaching possibly deeper into their structure. Accessibility of syntactic objects for the operation Agree requires further comments. The Activity Condition of Chomsky (2000: 123, 127), Chomsky (2001: 6) requires that the goal of an Agree search procedure be active in virtue of bearing an uninterpretable (unvalued) feature, which in the domain of A-relationships is effected by NP bearing an unvalued occurrence of the Case feature. The Activity Condition itself has been subject to criticism and dispensed with in various analyses, for both conceptual and empirical reasons (see in particular Nevins (2005), Bošković (2007), Bobaljik (2008), Preminger (2014), a.o.). The current setting does not allow adoption of the Activity Condition as a principle regulating availability of syntactic objects for Agree already for the reason that case is proposed to be considered a morphological phenomenon and no place for an abstract Case feature is provided; furthermore, the operation Agree-Link also operates in a manner different than the standard Agree operation. On the other hand, the condition as such provides a plausible way to account for unavailability of Multiple Agree involving objects which have already entered into an Agree relationship. Given that case is assumed here to be a purely morphological phenomenon, and that Agree-Link works in the domain of A-relationships so as to link an unvalued occurrence of  $\phi$ -features and an occurrence of a [+N] categorial feature, let us suppose that a version of the Activity Condition consistent with the present assumptions should state that an object remains accessible for the operation Agree until a pointer linking to its occurrence has been inserted by the operation Agree-Link to value a non-defective bundle of  $\phi$ -features. In other words, entering into the Agree-based relationship puts an end to the visibility for further application of Agree provided that the  $\phi$ -features of the goals are used all at once. It is a corollary of such web of assumptions that, since PRO in control structures, although apparently entering into an Agree-based relationship with-

in the embedded clause with its C-based set of  $\phi$ -features (inherited by T), remains active and visible for Multiple Agree reaching it from the matrix clause, the embedded C as the probe is defective, i.e. not endowed with a full set of  $\phi$ -features, which is also consistent with the surface shape of infinitives in control structures.

The phase as such may be assumed to remain strong, i.e. constituting a boundary for displacement, with the head C triggering Transfer (see Gallego (2009) for further discussion compatible with present assumptions). Case, being a morphological phenomenon, is dissociated from Agree—it is no longer a reflex of the Agree operation, as it is on the standard picture of the relationship between  $\phi$ -agreement and Case, and its assignment to PRO becomes a matter of morphological operations parasitic on relations established during syntactic derivation.

The relative ordering of the operations would begin with Agree-Link, taking place in the syntax proper; given that it is with a specified case value that the controller in (23) enters the process of Feature Transmission and the case value is preserved during the process, the operation Feature Transmission-Link may be hypothesized to take place early in the morphological component, before case assignment takes place and before Agree-Copy enters the stage, since the latter operation replaces pointers in (23) with the  $\phi$ -features, obliterating thereby the information about addresses at which objects entering Feature Transmission are to be found, giving the order as in (24):

- (24) Agree-Link  $\prec$  Feature Transmission-Link  $\prec$  case assignment  $\prec$  Agree-Copy

It is the place of Feature Transmission-Copy among the operations in (24) that remains to be determined. Insofar as the scenario in (13) with regard to controllers bearing a structural case (nominative or accusative) is concerned, the ultimate shape given to the structure by the morphological component is compatible with Feature Transmission-Copy either being a part of the stage at which case assignment operates or being applied after case assignment:

- (25) Agree-Link  $\prec$  Feature Transmission-Link  $\prec$  case assignment  $\sqsupset$  Feature Transmission-Copy  $\prec$  Agree-Copy

- (26) Agree-Link  $\prec$  Feature Transmission-Link  $\prec$  case assignment  $\prec$  Feature Transmission-Copy  $\prec$  Agree-Copy

On both (25) and (26), an NP controller receives its structural case, which undergoes transmission together with the  $\phi$ -feature set, resulting in obligatory case transmission attested for structural cases in (13); the place of Feature Transmission-Copy is therefore underdetermined by such data and solely on their basis may be settled one way or another. The behaviour of dative controllers, on the other hand, may reflect the difference between (25) and (26).

### 2.3. Dative controllers and their structure

The properties of NPs bearing accusative or nominative case differ in Latin from the properties of NPs marked with dative, genitive or ablative in a crosslinguistically familiar way; in particular, the latter group does not participate in overt  $\phi$ -agreement with the verb and does not undergo shift to nominative subjects with finite verbs or accusative subjects in the accusative and infinitive structure under passivization. On a decompositional approach to the Latin case system which takes morphological cases to be exponents of complexes of underlying feature values, as e.g. in Halle & Vaux (1998), the two groups differ in the value of a feature [ $\pm$ oblique], the group to which dative case marked nominals belong being marked as [+oblique]. The assignment of such feature value, as an assignment of a property which is present and interpretable only in the morphological component, may be assumed to track morphosyntactic properties of a nominal; Halle & Vaux (1998) tentatively assume that a [+oblique] feature value is assigned to nominals which are not arguments of the verb. Another route with regard to the [+oblique] feature to take would be to assume that its presence reflects a difference in syntactic structure between nominals belonging to the two groups; in particular, nominals assigned the [+oblique] specification might receive this feature value in the morphological component in virtue of being structurally richer than nominals assigned [–oblique] (alternatively, if it turns fruitful to analyze this feature as a privative one, the difference would be between nominals bearing a feature [oblique] and those lacking it).

The hypothesis that (at least a subset of) nominal phrases which ultimately bear one of morphological cases realizing a feature bundle containing a [+oblique] specification have a structural layer above the NP proper may be traced back to ideas which have a long pedigree in the generative tradition, details varying to a considerable degree. A major strand in thinking about such structures develops the idea that oblique cases instantiate a complex prepositional structure, with a prepositional shell above the NP proper hosting a null preposition, as proposed already in Emonds (1985) (who posits a null prepositional element *inter alia* in Latin datives) and applied in various ways to double object structures, bare NP adverbials, relative clauses, properties of (a subset of) experiencers (see e.g. Kayne (1984), Pesetsky (1995), Dikken (1995), Baker (1997), Landau (2010), a.o.; see also Pesetsky (2013) for an analysis of the Russian case system on which obliques have attached an affix of the category P). Another kind of approach to the analysis of oblique nominal phrases and their properties stems from an exploration of the CP—DP parallelism and the omissibility of case markings in syntactic contexts analogous to the phenomenon of complementizer omissibility, developed in Lamontagne & Travis (1986, 1987), Travis & Lamontagne (1992). On this approach, (a subset of) case-marked nominal phrases instantiate a Kase Phrase, consisting of a functional category K selecting a nominal phrase (in accordance with the DP hypothesis taken to be a DP). Although originally intended to account for the availability of “Case-drop” under adjacency with a verb in languages like Japanese, it was posited in Bittner & Hale (1996) for “marked cases” (accusative, ergative, and oblique in their proposal) in general, the “unmarked case” (nominative) being supposed to involve a bare DP, deprived of Case

as far as syntactic properties are concerned. The basic idea has been therefore pursued in various directions and implemented in various ways; if applied to the [+oblique] vs. [-oblique] distinction introduced above, the hypothesis might in the simplest case invoke a difference in structure consisting in the presence or absence of a lexical item above the common core of the NP structure, endowed with a specification as [+N]—in more traditional wording, a nominal projection with a minimal featural specification, which may be labelled “KP” (thus following the analysis of the German case system in Bayer, Bader & Meng (2001), but also the spirit—although not the letter—of the analysis of the structural-oblique distinction in McFadden (2014, 2018)). On this view, the presence of a [+N] head, otherwise devoid of featural specification, is required by the morphological component at the case assignment stage in either (25) or (26) for a nominal phrase to be able to receive and carry the [+oblique] specification.

An analysis of oblique cases along such lines has several consequences which may be only briefly mentioned here as far as they are of direct importance for the present discussion. The (syntactic) operation Agree-Link cannot be understood as involving a minimal search procedure for valued counterparts of unvalued features of a probe: whereas the probe will still carry unvalued  $\phi$ -features in our case, obliquely case-marked goals will be merely specified as [+N] in the syntax proper, with  $\phi$ -features hidden below the K-layer (in contrast to nominative or accusative goals, which will carry both [+N] feature specification as well as the  $\phi$ -feature set at the topmost layer of their structure). Following Atlamaz & Baker (2018), it may be therefore necessary to reformulate Agree-Link as involving a minimal search procedure for a [+N] goal, i.e. for a potential source of feature values (see Atlamaz & Baker (2018: 210-211)). Notice, incidentally, that if dative controllers are analyzed as quirky subject KPs, their structural complexity may account for the lack of morphological  $\phi$ -agreement with the verb. The assumption that structural complexity of syntactic objects which have an NP structure prevents them from participating in an overtly realized agreement relationship is common to hypotheses which posit such an additional layer for a subset of nominal phrases: the presence of an additional layer which does not include the set of  $\phi$ -features, be it as a silent prepositional element or as a K-head, provides on such assumption an explanation of the behaviour of nominal phrases with such structure. The presence of an additional projection (as the traditional parlance would have it) accounts for the unavailability of the embedded nominal phrase for mechanisms like specifier-head agreement (or its various counterparts).

Once agreement phenomena are hypothesized to result from processes taking place in two distinct components, viz. in narrow syntax and in the morphological component, it becomes necessary to distinguish the syntactic part and the morphological parts thereof. On the analysis adopted above, Agree-Link will establish a link with a nominative/accusative subject as much as with a dative one; but if one follows Atlamaz & Baker (2018: 209) in assuming that only the outermost layer of a phrase is available for Agree-Copy to operate with, a dative nominal will not be a possible source of  $\phi$ -feature values for the verb until the process of Fusion combines the K and n/N layers. Given that dative noun phrases never agree with verbal heads in Latin, it may be tentatively proposed that the ordering of relevant operations in the morphological component is as in (27):

- (27) Agree-Link < Feature Transmission-Link < case assignment < ... < Agree-Copy < Fusion

Recall that the postulated mechanism of feature transmission involves search over objects linked by the Feature Transmission-Link operation, which is therefore able to access features hidden from the view of Agree-Copy by the presence of additional structure. This property of the feature transmission mechanism may be hypothesized to be responsible for availability of  $\phi$ -features of a KP, i.e. a nominal with the layer K, for feature transmission: the search over KP will not stop at the K layer, as it has done for the purpose of the syntactic operation Agree-Link, but locates both the categorial [+N] specification at K and the bundle of  $\phi$ -features at the n head below.

It may be also observed that a reformulation of the syntactic part of the Agree operation (Agree-Link) as involving, in the case of  $\phi$ -agreement, unvalued  $\phi$ -features on the probe and nominal features on the goal makes it necessary to revisit the details of the labeling procedure. The basic cases thereof as analyzed in Chomsky (2013, 2015b) include, first, a complex object of the type {H, {XP}}, wherein the labeling procedure identifies H as providing the label of the complex object; second, an object of the type {XP, YP} in which the minimal search procedure attempts to find “shared prominent features”—a feature hosted by both X and by Y, with an unvalued occurrence at one of lexical items linked to a valued occurrence at the other by the syntactic operation Agree. With regard to  $\phi$ -features, the latter operation is initiated by a phase head, C or v, bearing unvalued  $\phi$ -features and searching for the closest goal bearing their valued counterparts in its domain, with Feature Inheritance operating subsequently so as to transfer  $\phi$ -features to the head of the phase complement (i.e. T or Root, respectively; see Epstein, Obata & Seely (2017) and Chomsky (2020)). With all reconceptualizations sketched above, the “shared prominent features” option would be probably replaced with labeling by pairs of unvalued features and potential sources of feature values, so as to cover both {NP, YP} and {KP, YP} cases.

The consequences of the analysis of [+oblique] noun phrases as involving a KP layer for an account of the patterns in (13) and (19) may be assumed to follow from an interaction of the structural properties of dative controllers and the orderings of morphological operations in (25) and (26). In particular, whereas nominative and accusative controllers may freely transmit both their  $\phi$ -feature specification and case (case feature bundles under a decompositional analysis of morphological case) to the PRO subject on the ordering in (25), it is impossible for a dative controller to transmit its case to the controllee—the PRO subject lacks the structural complexity required for a nominal to receive and carry the [+oblique] specification. On the ordering in (25) only  $\phi$ -features undergo Feature Transmission-Copy, whereas PRO has to be case licensed in its Spec-TP position, due to the fact that strong phase is (in Latin at least) the domain to which case licensing due to syntactic Agree is restricted, whence even under Multiple Agree with a matrix  $\phi$ -probe the latter cannot determine the morphological case of the element embedded within a CP (as it is the case not only with control, but also with accusative and infinitive structures). On the assumptions about the relationship between PRO and  $\phi$ -defective C/T made in section 2.2, PRO enters into an Agree-Link relationship with

unvalued  $\phi$ -features of C, crucially defective, so that PRO remains active under our understanding of the Activity Condition. The morphological case assignment to PRO in cases without feature transmission, while dissociated from the syntactic relationship, may be hypothesized to be partly parasitic on the latter.

With regard to accusative case assignment it has been proposed that there are two distinct flavours of nonfinite T heads: one without case assigning capabilities and one which licenses accusative (see Lasnik (2019) for this proposal within the syntax-centered framework of Case and Agree); we propose instead that  $\phi$ -defective T in Latin is capable to license accusative case assignment to a head of an A-chain in case there is no other source of case for the latter, as a semi-default case, as it were. Thus, in structures with case transmission there would be no case assignment to this position, since case would be established on another basis; yet in cases like (18) there is apparently no possibility to transmit the dative case, hence the mechanism of default case under restricted conditions may apply. It might be speculated that the mechanism in question finds its counterpart in the assignment of the nominative case in Icelandic control structures (although the debate on the source of case in these cases remains open; see already Andrews (1990: 226), Hornstein (1990: 220) for the view that PRO in Icelandic gets nominative as the default case). The ordering in (25) thus gives rise to the pattern in (19) with regard to dative controllers and to the pattern in (13) with respect to nominative or accusative ones. On the other hand, when the operation Feature Transmission-Copy operates when case assignment is no longer at work, as in (26), both groups of controllers may transmit their case feature bundles, restrictions operative during case assignment being no longer relevant. The order in (26) gives therefore rise to the pattern in (13) with respect to case transmission for both nominative-accusative controllers and for dative ones.

The behaviour of predicative adjectives in (11), (12), (14), (15), (16), (17) and (18) follows from properties of the structure so established on the assumption that they begin their derivational life together with PRO in a small clause structure [<sub>sc</sub> PRO, AP], from which raising of the PRO subject is required to occur for labeling reasons (as discussed in Chomsky (2013: 43-44)). As a matter of Latin morphological requirements, adjectives need a case and  $\phi$ -specification to be successfully targeted by Vocabulary Insertion rules. Although in cases in which case transmission occurs it seems in principle possible to implement case and  $\phi$ -properties transmission to adjectival predicates in terms of Multiple Agree and subsequent morphological operations, there are reasons to have it established solely in the morphological component. First, a Multiple Agree account could not extend to cases without case transmission, in which both case and  $\phi$ -feature specification depends solely on the featural content of PRO, which would run counter a unified syntactic analysis of all control structures. Second, the behaviour of predicative adjectives is apparently purely externalization-related, without consequences either for their syntactic behaviour or for interpretive purposes, hence most plausibly understood as a shallow morphological phenomenon (although see Wurmbrand (2017), Anagnostopoulou (2017) for the view that predicative adjectives come with unvalued features and require therefore Agree to be valued). Let it be hypothesized that Latin adjectives have their case and  $\phi$ -features copied from the closest occurrence of their subject which is endowed with a full case and  $\phi$ -specification as a result of strictly morphological operation parasitic on

the predication structure of a small clause. Their surface shape in (11), (12), (14), (15), (16), (17) and (18) then follows; note that the assumption that such morphological operation is at work in the case of predicative adjectives is justified independently of the analysis of control structures, since Latin adjectives behave in this way across all structures—there is neither a special predicative case available in Latin, nor is there any possibility to leave an adjective uninflected.

The analysis delineated above requires therefore that both (25) and (26) be allowed in the grammar, constituting a part of the morphological component. A change in the relative ordering of morphological operations results in the case at hand in variation with regard to a small corner only of morphological properties of Latin, apparent optionality in case transmission with regard to dative controllers reflecting the difference between (25) and (26). Recalling the postulates for an analysis of Latin data formulated in section 1.2, the obligatoriness of  $\phi$ -transmission in both (13) and (19) is accounted for under the present proposal: subject to Feature Transmission-Copy,  $\phi$ -features of the controller NP can be transmitted on both scenarios in (25) and (26). The obligatoriness of case transmission when the controller is either nominative or accusative also follows in both cases, there being no difference in this regard under either ordering of morphological operations. The apparent optionality of case transmission when the controller is dative, on the other hand, is explained as a result of the difference between (25) and (26) with respect to the place of the operation Feature Transmission-Copy, its relationship to the stage of case assignment in particular.

The analysis above may be compared with the analysis of case transmission effects in Landau (2008) (who takes Latin to be a uniformly case-transmitting language, apparently tacitly adopting the stance of Cecchetto & Oniga (2004), who take structures without case transmission to involve an accusative and infinitive rather than control; see also Landau (2013: 103-108)): on this theory, availability of case transmission depends on the featural specification of the complementizer, which in case transmission structures is not specified for Case, whereas clitic-like properties of C determine the exact pattern of case transmission (C having the ability to cliticize to a higher verbal head). Taking complementizers to cliticize on verbal heads has been postulated otherwise for an analysis of infinitival structures (see Bošković & Lasnik (2003) for a classic analysis along such lines), but the disadvantage of this approach to Latin structures under discussion seems to be that it ties the apparent optionality to hypothesized differences in the featural specification of the complementizer while divorcing the pattern of case transmission from otherwise empirically attested properties of the specific case which is involved in the non-transmission case: datives never agree with verbal heads nor do they undergo change to nominatives under passivization (note that the Ancient Greek pattern is much more free in this respect, as discussed in Sevdali (2013), which may be connected to differences in properties of the case system, on which see Anagnostopoulou and Sevdali (2015, 2020)). It is on this cluster of properties of Latin datives that the current proposal capitalizes.

The proposed analysis maintains a syntactically uniform nature of (13) and (19), with both belonging to the class of control structures, in contrast to an analysis which assumes a syntactic difference between (13) as a control structure and (19) as an accusative and

infinitive one. Finally, the fact that the analysis concerns ordering of morphological operations without affecting workings of narrow syntax squares well with the minimalist assumptions about the nature of linguistic variation as being due to externalization-related properties of language. Given that the behaviour of nominative and accusative controller NPs leaves the relative ordering of the stage of case assignment and the operation Feature Transmission-Copy undetermined, the oscillation between (25) and (26) arises, a phenomenon attested even for single idiolects.

### 3. Concluding remarks

The adoption of the hypothesis that both case and  $\phi$ -feature related copying operations take place in a postsyntactic component of the grammar makes it possible to capture properties of Latin control structures with regard to case and agreement. The obligatoriness  $\phi$ -feature agreement between the controller and the controllee and the apparent optionality of oblique case transmission are explained without postulating syntactic differences between structures with case transmission and those in which it does not take place. An orthodox strictly syntax-based account posits in such cases two distinct syntactic structures involving distinct lexical items (viz. a control structure with a PRO subject on the one hand and an infinitival clause of the accusative and infinitive type with a *pro* subject on the other). It is thus unable to explain the obligatoriness of the interpretive dependency between the NP in the matrix and the covert subject in the infinitival structure in both cases and it disregards the absence of expected differences in interpretive terms between the two types of structures.

An alternative account which keeps some features of the standard theory—in particular, the presence of PRO in control structures—but assigns both case assignment and  $\phi$ -feature copying processes cleans the syntactic part of the derivation from operations which may be supposed to belong to the morphological component and to underlie the surface variety observed in Latin control. Simultaneously, it allows to provide a unified analysis of the whole class of control structures. The phenomena discussed above are susceptible to an account which distinguishes between an application of Agree-Copy with concomitant Feature Transmission between the controller and the controllee at the stage of postsyntactic morphological processing at which case-related features are assigned, hence constraints on their assignment, including structural ones, are operative, and an application of the copying operation after the stage of case assignment, but before operations like Fusion apply. In the former case, only the transmission of  $\phi$ -features takes place if a dative controller is present, [+oblique] case feature requiring that there be a nominal shell above the NP, whence PRO receives its case features in the embedded clause; in the latter case, transmitting the complex of case features together with  $\phi$ -features becomes possible and thus takes place on the assumption that a process occurs whenever it can. In neither case is it possible, on the other hand, to copy  $\phi$ -features of a dative subject NP so as to obtain agreement with the T head due to their being hidden below the KP-shell at these stages. The default agreement exhibited by the matrix verb indicates therefore that both options are realized before the operation of Fusion enters the stage.

An account relying on an interaction and ordering of morphological operations occurring after the syntactic derivation proper opens a way to attribute the same syntactic analysis to both structures with and without oblique case transmission, capturing their interpretive behaviour and avoiding positing a syntactic distinction for a rarely occurring phenomenon. This line of analysis conforms with the hypothesis that linguistic variation—in this particular case, variation occurring synchronically, in some cases within the confines of a single idiolect (Cicero's Latin, for example)—is restricted to belong to the mapping from narrow syntax to representation(s) that are accessed by sensorimotor systems (EXT), as discussed in Berwick & Chomsky (2011, 2016) (see also Chomsky, Ott & Gallego (2019) for a recent discussion). It may be hypothesized that further investigation of similar phenomena, open to explanations in terms of purely externalization-related small-scale differences in the setup of the morphological component, will pave the way to fine-grained charting of the territory partly explored with regard to the ordering of such operations like the  $\phi$ -feature copying procedure, Fusion, linearization and Vocabulary Insertion in much recent work (see e.g. Bhatt & Walkow (2013), Arregi & Nevins (2012), Atlamaz & Baker (2018), Willer Gold et al. (2018), Kalin (2020), a.o.).

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## The relationship between the L2 Motivational Self System and attainment

David Sandeman

ECC Language Institute, Osaka

davidjsandeman@gmail.com | ORCID: 0000-0002-8497-6371

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Motivation is widely accepted to be a crucial aspect of language learning, and a variety of models of motivation have been proposed over the years. The L2 Motivational Self System is a particularly interesting model that reconceptualizes motivation as a function of possible future self-guides, and has far-reaching pedagogical implications. Critics have pointed out that there is little evidence connecting L2 Motivational Self System to attainment, as it is inconsistently correlated with L2 proficiency and is only a weak predictor of results. However, as this paper details, these criticisms ignore the correlation between the L2 Motivational Self System and other behaviors and attitudes associated with attainment, such as willingness to communicate, self-efficacy, persistent learning, and low L2 anxiety.

**Keywords:** motivation, L2 Motivational Self System, attainment, L2 proficiency

### 1. Introduction

Some second language (L2) learners make rapid, seemingly effortless progress, while others languish, unable to improve despite hours upon hours of study. Unfair as this situation may be, it illustrates the fact that language learning is a complex process governed by a myriad of external factors and individual differences. Of these individual differences, motivation in particular has garnered a lot of attention, with some claiming it to be the second strongest predictor (after aptitude) of language success (Saville-Troike 2006). Some even consider it to be the most important individual difference in regards to L2 acquisition, as, unlike a learner's genetically predetermined aptitude for language learning, motivation can be directly influenced and modified.

As interest in motivation continues to swell, an increasingly expansive number of studies into the nature and effect of motivation have been published (see Boo, Dörnyei, & Ryan 2015 for an examination of the patterns in motivation research). However, despite

the prodigious amount of research into this area, no single model of motivation has been able to comprehensively explain the temporal and dynamic nature of motivation (Truong 2021), nor has its relation to language attainment been fully understood. One model of motivation that has gained a lot of notice in the past few years is the L2 Motivational Self System (L2MSS), in part because of its relative simplicity and broad explanatory power.

While a strong correlation between motivation (as described by the L2MSS) and intended efforts has been widely demonstrated, the paucity of research utilizing objective measures such as grades and proficiency tests has raised concerns about the degree to which it correlates to actual attainment. However, as motivation is not a direct antecedent to proficiency but rather promotes it through inspiring behaviors and attitudes that facilitate acquisition, it is more worthwhile to examine the connection between motivation and attainment in terms of these facilitators.

## **2. The socio-educational model: Integrative motivation**

It would be nigh impossible to discuss any model of motivation without touching on the seminal work done by Robert Gardner and Wallace Lambert in Canada (Gardner & Lambert 1959) in which they proposed that L2 success might be affected by attitudes toward the target language community. This study examined L1 English students studying L2 French (in an English-French bilingual environment) and found students who studied because they wanted to learn more about the language community were more successful (as measured by teachers' ratings of oral and listening skills) than students who studied for more practical reasons.

This work developed into Gardner's socio-educational model (Gardner & Smythe 1975). While the model has undergone a variety of revisions (Gardner 1985; Gardner 2000) the essence of the model remains the contrast between integrative motivation, which reflects a "genuine interest in learning the second language in order to come closer to the other language community" (Gardner 2001: 5) and instrumental motivation, which is "related to the potential pragmatic gains of L2 proficiency, such as getting a better job or a higher salary" (Dörnyei 1994: 3). The socio-educational model holds that achievement arises from a combination of aptitude and motivation, and that integrative motivation is the most facilitative form of motivation (Gardner 2001).

A wealth of research has been undertaken on the socio-educational model. A meta-analysis of 75 studies performed by Gardner and associates (Masgoret & Gardner 2003) has shown it to be highly correlated with achievement (as measured by self-ratings of proficiency, objective measures of proficiency, and grades), and also shown integrativeness, albeit to a lesser extent than motivation, to be consistently positively correlated with achievement.

However, a number of challenges to socio-educational theory and the importance of integrative motivation have been raised. Numerous researchers have posited that achievement may cause integrative motivation rather than result from it (Backman 1976; Hermann 1980; Strong 1984). Others have questioned the impact of the context much of

Gardner's research took place in, as studies undertaken in different contexts have had contradictory results (Au 1988). Oxford and Shearin (1994) argued that motivation's influence might vary depending on whether the students are learning a language prevalent in the community (such as in bilingual Canada where Gardner and Lambert did their original studies) or a language students have little access to. Dörnyei (1990) similarly argued that the learning environment may affect motivation, not because of language availability, but because of its socio-political relevance. He posited that instrumental motivation may play a larger role than integrative motivation in contexts lacking significant contact with the target language community. However, a large scale study of language learners in Hungary (Csizér & Dörnyei 2005; Dörnyei, Csizér, & Nemeth 2006) found integrative motivation had a more powerful affect than instrumental motivation, despite the lack of direct contact with the target language community, suggesting that geographical and macrocontextual factors are more important than the learning context, an insight which would lead to the L2MSS.

### **3. The L2 Motivational Self-System**

The L2MSS radically alters the understanding of motivation and integrativeness by shifting the focus from external communities to internal constructs of self. Drawing on the theory of possible selves (Markus & Nurius 1986) and Higgins self-discrepancy theory (1987; 1996), Csizér and Dörnyei (2005) reconceptualized motivation as a function of possible future self-guides envisioned by learners which "give form, meaning, structure, and direction to one's hopes and threats, thereby inciting and directing possible behavior" (Dörnyei 2005: 100). The L2MSS identifies two types of self-guides: the ideal L2 self and the ought-to L2 self. They, alongside the L2 learning experience, are the major components of the L2MSS (Csizér & Dörnyei 2005; Dörnyei 2005; Dörnyei & Ushioda 2009).

The ideal L2 self refers to the L2 specific aspects of the learner's ideal self, that is the self which represents all that the learner aspires to be. Dörnyei theorized that it incorporated the concept of integration, as "if one's ideal self is associated with the mastery of an L2, that is, if the person we would like to become is proficient in the L2, we can be described ... as having an integrative disposition" (Csizér & Dörnyei 2005: 4), a supposition supported by consequent studies that found the ideal L2 self significantly correlated with integrativeness (Ryan 2009; Taguchi, Magid, & Papi 2009).

The ought-to L2 self "refers to the attributes that one believes one ought to possess" (Csizér & Dörnyei 2005: 5). This is the future self construed through social pressures, perceived obligations, responsibilities, and duties, which may be wildly different from an individual's own desires and hopes.

The L2 learning experience concerns the impact of the immediate learning environment and the learner's learning experience. This includes aspects such as the teacher, the curriculum, group cohesiveness, and other situation-specific components (Dörnyei 2019).

Much of the research into the L2MSS has focused on self-guides, with motivation theorized to predominantly arise from "the desire to reduce the perceived discrepancies

between the learner's actual self and his or her ideal and ought-to L2 selves" (Csizér & Dörnyei 2005: 5). Possessing vivid, well-realized images of these self-guides enables deeper comparison, creating stronger perceptions of discrepancies and increasing motivation.

In the years since the L2MSS was proposed, a wide range of studies have examined its validity in a variety of contexts. The vast majority of these studies have focused on the influence of the L2MSS's components on motivated learning behavior, in particular in terms of intended effort. On this basis, the L2MSS has been validated in cultural contexts as varied as Hungary (Csizér & Lukács 2010), Indonesia (Lamb 2012), Turkey (Thompson & Erdil-Moody 2014), China, Japan and Iran (Taguchi, Magid, & Papi 2009; Rajab, Far, & Etemadzadeh 2012), and for non-English L2s (Busse & Williams 2010; Csizér & Lukács 2010). All three components of the L2MSS have been shown to be strong predictors of intended effort (Al-hoorie 2018), however it should be noted that the majority of studies have identified the ideal L2 self to be the strongest predictor.

#### **4. Intended efforts and actual results**

Despite the evidence that the L2MSS is a valid predictor of intended effort, the dearth of research using objective measures such as academic results or L2 proficiency tests has been raised as an area of concern. Studies which do incorporate objective measures have found that the ideal L2 self, despite consistently being identified as a strong predictor of intended effort, is a far weaker predictor of academic results (Kim & Kim 2011; Dörnyei & Chan 2013) and is inconsistently correlated with L2 proficiency (Lamb 2012; Kim & Kim 2014a; Moskovsky et al. 2016), leading Moskovsky et al. (2016) to argue that the assumption that greater intended efforts to learn an L2 lead to increased proficiency should not be treated as axiomatically true, and suggest that self-reported motivation may not necessarily have behavioral consequences

However, there is a fundamental problem with this "proof is in the pudding" argument. Motivation is far from the only ingredient in the recipe for L2 success. Proficiency comes about through a complex web of factors, of which motivation plays only a part, albeit an important one. A poorly motivated learner gifted with a talent for language learning might well be more proficient than a highly motivated learner with little aptitude. Which is not to say that objective measures are not an important tool – they clearly are. However, motivation alone does not guarantee success or a high level of proficiency. What it does do is facilitate L2 attainment by affecting attitudes and behaviors that promote L2 acquisition. Which is to say that a motivated learner may be expected to achieve a higher level of proficiency than they would have had they been unmotivated, but not necessarily to achieve a higher score on a proficiency test than other, less motivated learners. Objective measures such as these would indeed be quite revelatory given access to parallel worlds where we could measure the proficiencies of L2 learners identical in all regards except motivation. Lacking this, however, it is of more worth to focus on motivation's relationship with the attitudes and behaviors that promote language acquisition. Intended effort is one such attitude, but it is far from the only one.

## **5. Other attitudes and behaviours leading to attainment**

### **5.1. Willingness to communicate**

Willingness to communicate (WTC) is a concept that has gained a lot of attention in L2 research. Simply put, WTC is “the intention to initiate communication, given a choice” (MacIntyre et al. 2001: 36) (see MacIntyre et al. 1998 for a detailed description of WTC). It is considered the most immediate antecedent of actual communication, and is of great importance as it influences the amount and frequency of a learner’s L2 communication (Yashima 2002; Clément et al. 2003), which facilitates successful language acquisition.

WTC has been shown to affect communication in many ways. A higher WTC is associated with more L2 use in the classroom (MacIntyre et al. 1998; Kanat-Mutluoğlu 2016; Munezane 2016), an increased likelihood to use the L2 in authentic communication (Kang 2005), higher levels of fluency (Derwing, Munro, & Thomson, 2008) and language proficiency in general (Yashima 2002).

Substantial evidence linking WTC with the ideal L2MSS has been found. Xie (2014) and Yashima (2009) both found significant correlation between the ideal L2 self and WTC, and Munezane (2013; 2016) found a significant positive causal pathway from the ideal L2 self to WTC. Studies conducted by Lee and Lee (2020) and Lee and Lu (2021) found that students exhibiting stronger ideal L2 selves not only displayed a higher level of WTC inside the classroom, but were also more inclined to engage in L2 communication outside the classroom, such as by posting comments and having conversations using social media. This positive causal link between the ideal L2 self and L2 WTC provides substantial evidence that strong ideal L2 selves leads to increased communication, and ultimately increased language acquisition.

### **5.2. L2 Anxiety**

A high level of L2 anxiety has been shown to pose significant problems for L2 learners as it hampers the acquisition, retention and production of new language (MacIntyre & Gardner 1991). Not only does it negatively affect language production, it also impairs L2 learners’ abilities to receive and process input (MacIntyre & Gardner 1994; Oya et al. 2004), which plays a vital role in language acquisition.

Research into the relationship between the L2MSS and L2 anxiety has clearly shown that both the ideal L2 self and the L2 learning experience have a negative effect on learner’s levels of anxiety, while the ought-to L2 self exerted a positive effect on anxiety (Papi 2010; Peng 2018; Shih & Chang 2018). This strongly suggests that enhancing learners’ ideal L2 selves should result in learners suffering less from anxiety related impediments to acquisition and being more open to engage in L2 communication.

### 5.3. Persistence in L2 learning

Persisting in the pursuit of L2 language learning is vital for L2 attainment. While a multitude of factors can aid or hinder acquisition, the surest method of failure is to completely withdraw from the learning environment. As motivation is not only the force required to begin an activity, but the drive to continue, it is not surprising that it has been postulated as significantly contributing to persistence (Clément, Gardner, & Smythe 1977; Northwood & Kinoshita Thomson 2012). Despite this, to my knowledge, there has been only one study to directly examine the L2MSS and its connection to the continued pursuit of L2 learning. Feng and Papi (2020) found that the ideal L2 self was a positive predictor for learning persistence, whereas the ought-to L2 self acted as a negative predictor. It should be noted that L2 persistence in this study was based on measurements of learners' intentions to continue studying, and it could be argued that this may not accurately reflect which learners do actually continue to persist in their language studies – which would require an extremely time-consuming longitudinal study to investigate fully.

The notion that the ideal L2 self plays a role in promoting persistence is collaborated by its strong correlation to intrinsic motivation and the more internalized forms of extrinsic motivation (Yashima 2009), as detailed by self-determination theory, which posits three types of motivation: intrinsic motivation, extrinsic motivation, and amotivation (for a full account see Deci & Ryan 1985). A number of studies have found that persistence in L2 study is closely correlated to intrinsic motivation and more internalized extrinsic motivation, whereas amotivation is closely correlated with discontinuing studies (Ramage 1990; Noels 2005; Comanaru & Noels 2009). This logically suggests that the ideal L2 self would also be correlated with language learning persistence.

### 5.4. Self-efficacy and self-regulated learning

Self-efficacy is, essentially, one's belief in their ability to succeed at a given learning task. It is of particular import because it has been closely linked to self-regulated learning (Kim et al. 2015; Kitikanan & Sasimonton 2017), which is the degree to which individuals become metacognitively, motivationally, and behaviorally active participants in their own learning processes (Zimmerman 1998). An overwhelming amount of research has demonstrated self-regulated learning's role in improving L2 learning and language learning autonomy (Andrade & Bunker 2009; Gunning & Oxford 2014; Ma & Oxford 2014; Oxford 2011; Pintrich & De Groot 1990; Zimmerman & Risemberg 1997).

Self-guides, particularly the ideal L2 self, have been found to be highly correlated with self-efficacy. Piniel and Csizér's (2013) proposed and found evidence for a circular relationship between self-efficacy and motivation. While Ueki and Takeuchi (2012) found that self-efficacy had a causal effect on the ideal L2 self, Roshandel et al. (2018) found the ideal L2 self to be a powerful predictor of L2 self-efficacy, and Shih and Chang (2018) found that self-guides in general serve as a good predictor for self-efficacy. In addition, a direct link between the ideal L2 self and self-regulated learning has been found, as a stronger perception of one's ideal L2 self correlates to higher levels of

self-regulated learning (Domakani et al. 2016; Kim & Kim 2014b). In short, having a vivid perception of the ideal L2 self leads to both higher self-efficacy and more self-regulated learning, facilitating language acquisition.

## **6. Areas for further research**

There is still much more research required to gain a deeper understanding of the L2MSS and the effect it has on attainment and other aspects of L2 acquisition. As already mentioned, more studies into the role the L2MSS plays in learner persistence, self-efficacy, achievement, and anxiety needs to be undertaken to determine the exact extent that the different components of the L2MSS affect these areas.

Furthermore, to truly capture the nature of the role played by the L2MSS, more qualitative studies are required. To date, this area of L2 research has been swamped with a preponderance of quantitative studies. Qualitative research might give us deeper insight into the nature of the L2MSS and a firmer understanding into the commonly used measure of “intended effort”, and how it relates to actual effort and, ultimately, achievement and attainment.

More research into the nature of the L2MSS itself is also needed. It is very possible that there are other “possible selves” out there that could refine and enrich the model. Thompson (2017), for example, has proposed an “anti-ought self” and presented some evidence that it has an effect on motivation. Additionally, while some research has been undertaken into the role of the L2MSS when studying third or fourth languages (Henry & Thorsen, 2017), there is still much more to explore in regards to multilingual learners.

## **7. Pedagogical implications**

While a full detailing of the pedagogical ramifications arising from the L2MSS is beyond the scope of this paper, it would be remiss not to note the very real potential to increase student motivation it provides. As Dörnyei and Ushioda (2011) wrote, “[t]he possibility of harnessing the powerful motivational function of imagination opens up a whole new avenue for promoting student motivation by means of increasing the elaborateness and vividness of self-relevant imagery in the students’ (130). In other words, it is very feasible to increase L2 learner’s motivation through the implementation of vision-inspired activities to help students realize a more vivid conception of their future self-guides.

While the framework for such a program has been described in detail by Dörnyei and Ryan (2015), the essential elements consist of creating and strengthening a learner’s image of themselves as an L2 user and how the L2 could benefit their lives, grounding that vision in realistic expectations, constructing a blueprint of how to actualize that vision, and reactivating that image over time to keep it alive. They also recommend creating a corresponding awareness of the effect and results of failure to help maximize the motivational effect.

These vision based motivational interventions have been shown to have a positive effect on L2 learner's motivation (Fukada, et al. 2011; Sampson 2012; Chan 2014; Mackay 2014; Magid & Chan 2014) and there are numerous activities (see Dörnyei & Kubanyiova 2014) that teachers can use to aid their students in creating deeper, richer images of their ideal L2 self.

Personally, I have found great success with even simple activities that focus students' imaginations towards how their L2 could enhance and improve their lives. Activities such as asking students to imagine and discuss what would be easier if they had a mastery of their L2, how their life would change if they had mastered their L2, or what they would first like to do when they have mastered their L2 are all simple, relatively quick activities that encourage students to engage with and deepen their image of their ideal L2 self. Longer activities designed around future career aspirations are also very easy to tie to the ideal L2 self. Incorporating imagining and discussing the role their L2 could play and the benefits it could bring to a career into activities involving discussing dream jobs or what students want to do in the future has worked well with students of all levels. Students at higher levels might enjoy activities such as asking the class to act out a class reunion set five or ten years in the future, and have them discuss and imagine what experiences their mastery of the L2 has enabled them to have and what career success their L2 has led them to achieve. Developing these positive images of achievement tied to L2 success has seen a noticeable increase in the motivation of my students.

## 8. Conclusion

The journey to L2 attainment is complex and our understanding of it is far from complete, but the L2MSS does provide some insight into how L2 learners find the impetus to embark on that journey and the persistence to persevere. While being motivated does not guarantee attainment, it does promote behaviors and attitudes that facilitate language acquisition. Despite the need for further research, learners with a vivid ideal L2 self do tend to make more effort, be more willing to communicate, have more self-efficacy, be less anxious, and be more likely to persist in the pursuit of L2 attainment. Given these benefits and the ease with which the vividness of future self-guides can be enhanced through incorporating vision-based activities into the classroom, it very much behooves teachers to be aware of the research being done in this area.

## Abbreviations

L2 – second language

L2MSS – second language motivational self system

WTC - willingness to communicate.

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## Angas-Sura etymologies XI<sup>1</sup>

Gábor Takács

Department of Classical Philology, University of Łódź (UŁ)

Lexicographical Library of Afro-Asiatic Root Research at Balatonederics (LLAARR)

Member of the Associazione Internazionale di Studi sul Mediterraneo e l'Oriente, Roma (ISMEO)

e-mail: gabtak@datatrans.hu | ORCID: 0000-0002-2466-6451

Dedicated to the memory of my dear Father,  
József Takács (1940-2022)<sup>2</sup>

**Abstract:** Gábor Takács, *Angas-Sura etymologies XI*. The Poznań Society for the Advancement of Arts and Sciences, PL ISSN 0079-4740, pp. 49-76

The paper as part of a long-running series is devoted to the etymological analysis of a new segment (namely that with initial dental \*z-) of the Angas-Sura root stock, a small group of modern languages remotely and ultimately akin to pharaonic Egyptian and the well-known Semitic languages or Twareg in the Sahara etc. Doing so, I wish to continue the noble tradition initiated by J.H. Greenberg (1958), the founding father of modern Afro-Asiatic comparative linguistics (along with I.M. Diakonoff), who was the first scholar ever to have established by Neo-Grammarians the methods regular consonantal correspondences between Angas-Sura and ancient Egyptian in his pioneering (painfully isolated) paper on the ancient trichotomy of the word-initial labials in both branches. Nowadays our chances in following this path are substantially more favourable being equipped with our gigantic comparative root catalogue system of the Egyptian etymologies ever published (ongoing since 1994) and of the Afro-Asiatic parental lexical stock (ongoing since 1999).

**Keywords:** Afro-Asiatic comparative-historical linguistics, African linguistics, Chadic languages, phonological reconstruction, consonantism, etymology, ancient Egyptian, Semitic studies.

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<sup>2</sup> A true *Lebenskünstler* in the best sense of the word, a lover of life and an almost perfect *perpetuum mobile* until the very end of his enormously productive life. It was during writing this paper that his fronto-temporal atrophy (incurable at the moment all over the world) definitely forced him into bed. As a carpenter by his original profession, he had played a fundamental rôle, beginning from 1993, in the long construction phases of the uncountable wooden containers in my traditional paper-based linguistic library in our good old panel block apt. at Székesfehérvár, which was moved in 2015 into our new house in Ederics bay. He took part in building up my Afro-Asiatic linguistic library also by transporting tons of xero-copies from abroad with his car, all in all several thousands of km, on a number of occasions when I had completed my extremely fruitful missions in the libraries of Frankfurt a/M (Dec. 2000 and Aug. 2002), Vienna (June and Nov. 2004, June 2007), Berlin (Sept. 2004).

## Introduction

The languages of the Angas-Sura (AS) group are spoken between the South-Eastern Plateau and the Benue river, Plateau State of Nigeria, by about 200.000 people in the estimation of H. Jungraithmayr (1981: 407). The Angas-Sura language group belongs to the West Chadic subbranch (cf. e.g. Jng. 1981: 407-408; Stolbova 1987: 31; JI 1994 II, viii) of the Chadic branch, which, in turn, represents part of the great Afro-Asiatic (Semitic-Hamitic) language family (or phylum), which is divided into six equipotential cognate branches: Semitic, Egyptian, Berber, Cushitic, Omotic, Chadic.

The best inner classification of the Angas-Sura group was suggested by C. Hoffmann (1971; 1975 MS: 2), who assumed Gerka to have been the first member split off from the group. The remaining group falls into three subgroups: (1) **Northern**: Angas, (2) **North-Eastern**: Sura (Mwaghavul), Mupun, Chakfem-Mushere Chip, Jorto, Kofyar, (3) **Southern**: Kanam (Koenom), Pyapun(g), Tal, Montol, Goemai (Ankwe). On the basis of my own research on comparative AS phonology, I can state that the phonological isoglosses confirm the correctness of Hoffmann's inner classification. Henceforth, I use the following (slightly modified) inner grouping: (1) **Gerka**, (2) **Angas**, (3) **Suroid** languages (falling further on in two clusters: 3.1. Sura-Mupun vs. 3.2. Kofyar-Mushere-Chip according to the isoglosses of the complex AS \*gʷ-), (4) **Goemaioid** languages (Kanam/Koenom, Pyapun/Pyapung, Tal, Montol, Goemai).

The inner reconstruction of the Angas-Sura language group had only been elaborated in minor segments<sup>3</sup> until the first comparative lexicon of the Angas-Sura group has been completed (Takács 2004)<sup>4</sup>. Now, it has become plausible to systematically deal also with the external cog-

<sup>3</sup> Thus, J.H. Greenberg (1958) surveyed the Angas-Sura roots beginning with labials pointing out the original labial triad \*b - \*p - \*f inherited from Afro-Asiatic. O. V. Stolbova devoted two studies to the subject, using basically the Angas (Foulkes 1915, Ormsby 1913-4) and Sura (Jungraithmayr 1963) lexicons for the comparison adducing some additional data from Chip, Montol, Gerka (collected and published by Jungraithmayr 1965). In 1972, she proposed a historical-comparative survey of the Proto-Angas-Sura consonant system in the light of some illustrative lexical material (2-3 exx. for each correspondence). In her 1977 paper, Stolbova presented 256 lexical roots and Proto-Angas-Sura reconstructions accompanied by a brief sketch of vowel correspondences. C. Hoffmann (1975 MS) offered a phonological (both consonantal and vowel) reconstruction of the Proto-Angas-Goemai level (on the basis of Goemai, Mernyang, Sura, and Angas) through 248 lexical roots. The West Chadic historical phonology by Stolbova (1987: 240-244) also contains a separate list of some 64 Proto-Angas roots.

<sup>4</sup> I express my best thanks for the constant and many-sided unselfish support yielded for my work by the great Chadicist, Prof. Herrmann Jungraithmayr (Institut für Afrikanische Sprachwissenschaften, J.W. Goethe-Universität, Frankfurt a/M). I am greatly indebted also to the Alexander von Humboldt-Stiftung (Bonn) for facilitating my research stay at Frankfurt a/M (1999-2000, 2002) as well as for funding the publication costs of the Angas-Sura comparative lexicon together with the OTKA (Hungarian National Scientific Research Fund, project nr. D 45976). I express my deep gratitude to the City Hall of Székesfehérvár (Hungary) for its "Lánczos-Szekfü" prize granted almost twenty years ago for an early phase of my research on the Afro-Asiatic background of the Angas-Sura lexicon, which I eventually began back in Sept. 1998 during my research at the Haifa University (funded by the OSI at Prague, which is gratefully acknowledged also in this place) with the guidance of the late Prof. A.B. Dolgopolsky (1930-2012), one of the greatest Afro-Asiatic or Semito-Hamitic comparativists of all times, may his memory be blessed.

nates of the Angas-Sura lexical stock. The series “Angas-Sura Etymologies”<sup>5</sup> is contributing to outlining the so far unknown background of Angas-Sura lexical stock primarily with new lexical parallels. In this issue of my series, the new external (Afro-Asiatic) correspondences of some of the Angas-Sura (AS) roots with initial \*z- are discussed, collected mostly during my 2019 research on the Afro-Asiatic root stock with initial dentals in my Ederics library.

### Some peculiar elements of the Afro-Asiatic background of the Angas-Sura historical consonantism

- A general devoicing of the voiced PAA stops in the Auslaut of the AS stems is a recent development. There are but a handful of records of older final \*-b#, \*-d#, and hardly any for \*-g# (cf. Takács 2004: xxv-xxvi, xxxi, resp.). Sometimes the devoicing of plosives may be observed even in other positions too under conditions that cannot be precisely known as yet.
- Labials basically reflect the original AA triad of \*b, \*p, \*f as demonstrated by J.H. Greenberg (1958) and manifold corroborated by V.M. Illič-Svityč (1966: 9, 14-15), O.V. Stolbova (e.g., 1996: 15, §I.1.), and G. Takács (2001: 55; 2011: 148-152 etc.).
- AS \*-VγV- < either an AA root medial “laryngeal” or a velar or a semi-vowel, i.e., where the -C<sub>2</sub>- of AA \*√C<sub>1</sub>C<sub>2</sub>C<sub>3</sub> was either \*-h/?/h/?- or \*-g/k/γ/ħ- or \*-w/y-, but sometimes it is just epenthetic without a consonantal precedent (cf. Dolgopolsky 1982: 32-36).
- Original AA pharyngeals (\*ʕ, \*ħ) and laryngeals (\*ʔ, \*h) were mostly preserved in the Inlaut as AS \*-γ- (above). In the Anlaut, normally, AA \*ʕ- and \*ʔ- > AS zero, while AA \*ħ- and \*h- > either AS \*h- or zero. In the Auslaut, they mostly disappeared, but sometimes they developed in the contrary way, i.e., AA \*ħ- and \*h- may have resulted in AS \*-k#.
- Final AS \*-ŋ – beside being a natural result of an older nasal (\*m, \*n) + velar, of course – otherwise usually derives from the contraction of an AA medial nasal (\*-m- or \*-n-) + lost AA pharyngeal (\*ʕ, \*ħ) or laryngeal (\*ʔ, \*h), cf. already Illič-Svityč 1966: 33, fn. 11.

### AS \*z- (+ nasals) = Eg.-Brb.-Sem. \*z- < AA \*ǵ-

- **356. Suroid \*zam** “much” [GT]: Sura zâm “1. sehr, viel, 2. wirklich” [Jng. 1963: 89], Mupun zâm (adv.) “very much” [Frj. 1991: 69] (AS: Takacs 2004: 422) III Sem.: Ar. zamma I “8. remplir (une outre), 9. être rempli”, zumzûm- “masse, amas, grande quantité (de toutes

<sup>5</sup> The first part (AS roots with initial \*b-) appeared in *Lingua Posnaniensis* 46 (2004), 131-144. The second one (AS roots with \*b-) in *Rocznik Orientalistyczny* (Warsaw) 57/1 (2004), 55-68. The third issue (AS \*p-) in *Lingua Posnaniensis* 48 (2006), 121-138. The fourth part (AS \*f-) has been published in *Folia Orientalia* (Kraków) 47/2 (2011), 273-289. The fifth part (AS \*m- in monoconsonantal roots) in the *Cahiers Caribéens d’Égyptologie* (Schoelcher, Martinique) 13-14 (2010), 137-142. The sixth part (the rest of AS etymons with \*m-) is forthcoming in *Rocznik Orientalistyczny* (Warszawa) 74/1 (2021), while the seventh one appeared in *Lingua Posnaniensis* (Poznań) 62/3 (2020), 95-120. The eighth part in *Folia Orientalia* (Kraków) 57 (2020), 321-354. The ninth part in *Lingua Posnaniensis* (Poznań) 63/1 (2021), 53-72. The tenth one is forthcoming in *Lingua Posnaniensis* (Poznań) 64/1 (2022).

choses)”, zamzam-(at)- “abondante (eau), qui jaillit abondamment de la source”, zumāzim- “abondant” [BK I 1008, 1011] (DRS 745, 749: isolated in Sem.). AS-Sem.: Takács 2001: 78; 2011: 154.

● **357. AS \*zam** → **\*zaj** “stick” [GT]: Mushere nzang “stick” [Jng. 1999 MS: 13], Goemai zam “a rod, a slender stick” [Sirlinger 1937: 284] | Pero žím [unexpected -i-] “tree stub” [Frj. 1985: 33] ||| ECU. \*zām- [< \*zaʔm-] “twig, branch” [Sasse 1976: 140; cf. Leslau 1988: 186] = \*daʔm- [Sasse 1982: 52] ||| (?) Eg. zm3.w [regular < both \*√zmr and \*√zmʔ] (pl.) “die Zweige der Bäume” (MK, Wb III 452, 2-5) = “branches of tree” (FD 226) < AA \*3Vmʔ- “branch of tree” [GT]. ECU.-Eg.: Dolgopolsky 1983: 140 followed by Blažek 1990 MS Bed., 5, #8. AS-ECU.-Eg.: Takács 2001: 78; 2011: 154.

**357.1.** The triconsonantal extension of the same AA root may be seen in Sem.: (???) Akk. (aB, ass.) (a)zamru(m) “Bez. von Früchten” [AHW 1509: “u(nbekannter).H(erkunft).”, i.e., “of unknown origin”] = (a)zamru “(a tree or shrub and its edible fruit): a) (referring to a tree), b) (referring to the fruit)”, perhaps this “could be the designation of the *Zizyphus vulgaris* (*spina Christi*), not the *Zizyphus jujuba*” [CAD z 40-41]<sup>6</sup> || Ug. azmr (m) “branches” [DUL 137] = āzmr “branchages (?)” [DRS] (not translated in Gordon 1965: 393, #823 and the WUS 98, #883), OHbr. √zmr II qal “to prune” [KB 274]<sup>7</sup> = zəmorāh “vrilles de la vigne”, \*zāmar “tailler la vigne” [DRS] (Sem.: DRS 751, ZMR2) ||| (?) Eg. zm3.w [regular < both \*√zmr and \*√zmʔ]<sup>8</sup> (pl.) “die Zweige der Bäume” (MK, Wb III 452, 2-5) = “branches of tree” (FD 226) ||| (?) NBrb. \*√zmr: Rif a-zemmur, pl. i-zemmur-en, Shilh, Zwawa, Bugi (Bougie) a-zemmur “arbre” (NBrb.: Basset 1883: 290) ||| CCh.: (???) Mbara zīmār (m) “bâton de combat” [TSL 1986: 282], Munjuk-Puss zəmar (m) “pilon” [Tourneux 1991: 128] < N/CAA \*√3mr “1. branch (of a special tree???), 2. stick (in general)” [GT].

● **358. AS \*zam** ~ (?) **\*sam** “dark” [GT]: Mupun zám (ideoph.) “black jet” [Frj. 1991: 69], per-haps cognate with Goemai sam “grey of colour” [Sirlinger 1937: 197] || CCh.: Tera-Pidlimdi žum “darkness” [Kraft > Mukarovsky] | Mwulyen žěmì “shadow” [Kraft 1981: #261] ||| HECU.: perhaps Burji damm- [d- < \*z- plausible] “to pass the night” [Sasse 1982: 52].

**358.1.** The same root may have been extended to a trilateral one preserved by the exclusive Egypto-Chadic isogloss of ECh.: Mokilko zímòlò “Dunkelheit” [Lukas 1977: 219] = zímòlò [Mukarovsky] ||| Eg. zm3.wj (or \*sm3.wjʔ) “Finsternis, Dunkelheit” (LP, Wb III 452, 6), kkw-zm3.w “Dunkel(heit), Dämmerung” (XVIII., Wb V 143-144). The Tera word above

<sup>6</sup> The editors of the CAD l.c., all in all, referring back to the study by Ebeling (*Orientalia* NS 21, 141) at the end of this entry, arrived at the opinion that this lexeme is: “a designation of a tree or shrub grown in gardens and yielding an edible fruit that was stored either in baskets or (possibly preserved or otherwise prepared) in earthenware containers. No definite identification can be proposed, but it is possible that zamru is the Assyrian designation of a fruit known in Babylonia under another name. In spite of the untenable etymology proposed by Thompson, ... zamru could be the designation of the *Zizyphus vulgaris* (*spina Christi*), not the *Zizyphus jujuba* that, according to Guest, ... is not cultivated in Iraq.”

<sup>7</sup> The OT Hebrew root was affiliated in KB l.c. with Ug. zbr and Ar. zabbara “to circumcise”.

<sup>8</sup> The position of Eg. zm3.w depends on the nature of -3-. Other etymologies for Eg. zm3.w (offered in Hodge 1976: 19, #34; Ehret 2000 MS: 114, #1537) are not acceptable.

was, by the way, directly equated by H.G. Mukarovsky (1987: 139) with the Mokilko one, while by V. Orel and O. Stolbova (1992b: 209; HSED #2624)<sup>9</sup> with Eg. zm3.w (sic).

**358.2.** A remote root variety with a lateral C<sub>1</sub>- may be represented by Sem.: Ar. √šym > šām-at- “2. tout signe noir qu’on voit sur la terre, 3. chamelle noire, 4. tache dans la lune”, ʾašyamu “noir” [BK I 1300].

● **359. Goemai \*zam** “farm, field” [GT]: Goemai zam “farm” [Ftp. 1911: 216] = zam “farm” [Sirlinger 1937: 284] = zam “field” [Hellwig 2000 MS: 42] (isolated in AS: Takacs 2004: 422) | Nbauchi \*zim “поле” [Stolbova 1987: 262, #13] = \*zim “field” [GT] || Eg. zmj.t “1. Wüste (bes. von Wüstenrande), 2. Begräbnisstätte” (PT, Wb III 444-445).

● **360. AS \*z<sup>w</sup>am ~ \*z<sup>w</sup>em (?)** “snake sp.” [GT]: Montol zεm [z- < \*z<sup>w</sup>-?] “Schlange” [Jng. 1965: 172], Goemai zwam “a poisonous snake” (≈ Hausa ígíyàr kàsà “any snake” [Abraham 1962: 397]), cf. perhaps also ži-kuk zwam “a caterpillar” [Sirlinger 1937: 286, 84] = zwam “viper” [Hellwig 2000 MS: 42] (AS: Takacs 2004: 429) || SCu.: PRift \*c/çema (ts/ts-) “python” [Ehret]: Burunge čima (c-) “python”, Alagwa cima (ts-) “python” | Qwadza cema (ts-) “snake” (Rift: Ehret 1980: 355, #III.C.5).

● **361. Kofyar zwam** (repeated action of ták) “1. to dress, put on cloth, 2. throw” [Netting 1967: 38]: although the Kofyar verbal sense listed as second in the source above (Netting l.c.) sounds all too general to be ignored as possibly its primary (?) one, it would be tempting to affiliate it with ECh.: PCh. \*zVm- “kind of clothing” [CLD] = \*√zm “dress (ing) (either of leather or cloth)” [GT] > CCh.: Lame (Zime-Batna) zīm “vêtement ancien tissé avec la fibre de ‘gùgùlè’” [Sachnine 1982: 434], Zime-Dari ž/žim (Cooper: 3-) “vêtement ancien qu’utilisait les ancêtres” [Cooper 1984: 31] || ECh.: Bidiya zìmlà “vêtement, tissu” [AJ 1989], WDangla ziminnà “pagne des femmes” [Fédry quoted in CLD] | Mubi-Toram \*zām- “leather (cloth)” [GT] > Birgit zàamà (m), pl. záamì “peau” [Jng. 2004: 360], Kofa zám (m), pl. zámè “cloth (material), drap, tissu, peau (‘pagne’)” [Jng. 1977 MS: 8, #153] (Ch. sine Kofyar: CLD III 134, #494) || Sem.: cf. perhaps Geez zəʿəme “fringe (?), some kind of garment (?)” [Leslau 1987: 630].<sup>10</sup>

**361.1.** Root variety with a voiceless sibilant *Anlaut* in Ch. \*sVm- “skin” [CLD III 88, #272]?

**361.2.** May we see the same root with a C<sub>3</sub> root extension in ECh.: Mubi zòmòdé (zùmút, zùmóot), pl. zamađe (zemit, n.a.) “(se) couvrir (avec une couverture)” [Jng. 1990 MS: 50]?

● **362. Goemai zèm [zεm]** “grain, the arrangement of fibres in a thing” [Sirlinger 1937: 284] (Takacs 2004: 424; isolated in AS) || SCu.: WRift \*ca/ima (\*tsa/ima) [\*c- regular < AA \*3-] (m) “core of a tree” [KM] > Iraqw camú (ts-) (m) “legume with strong fibre”, Gorowa cima (ts-) “core of a tree”, Alagwa camì (ts-) (f) “core of a tree”, Burunge čēmiya (f) (c-) “core of a tree” (WRift: KM 2004: 290) || Eth.-Sem.: (?) Amh. ḡəmmat “nerfs, veines, muscles, tendons, cordes de lyre” (ES: DRS 748-749, ZMM1) < AA \*√zm “plant fibre” [GT].

<sup>9</sup> Where Mokilko was misquoted as Migama.

<sup>10</sup> This is of a doubtful meaning, Leslau’s alternative rendering is: “tuft of hair (?)”. See also entry no. 368 below.

**362.1.** The underlying verbal root of this unique isogloss (eventually related to the AA root of Goemai zum “straps” [Hellwig 2000 MS: 42] below) may have been preserved in WCh.: SBAuchi: Polchi zumu (dz-) “to gather” [Kraft 1981 II 239] || Sem.: Ar.  $\sqrt{zym}$  V “2. s’accumuler, s’entasser de manière à former une masse compacte”, ziyam- “chairs agglomérées ça et là sur tous les membres du corps” [BK I 1043] < AA  $\sqrt{zm}$  “to accumulate” [GT].

**362.2. NAA  $\sqrt{zml}$**  “to unite” [GT] contains the same biconsonantal root as in one of the next entries (see there under no. 365), which developed semantically especially close reflexes in the trilateral Egypto-Semitic isogloss of Sem.: Ar.  $\sqrt{zml}$  I: zamala “3. s’adjoindre qqn. pour faire l’ouvrage” > ziml-at- “1. réunion de tout ce qui est touffu et entrelacé, p.ex., de jeunes et petits palmiers”, zamal-at- “famille, maison (y compris les domestiques et les suivants), *Smala*” [BK I 1013] =  $\sqrt{zml}$  “(Grundbedeutung:) vereinigen, sich anschließen” [von Calice] || Eg. zm3 “vereinigen” (OK-, Wb III 446-447). For the abundant literature of the well-known Eg.-Sem. match see EDE I 377-378, also Ehret 2000 MS: 104, #1487. For the biliteral Semitic etymology see Vycichl 1934: 43; 1936: 109; 1939: 141; Brunner 1969: 119, #657; Zaborski 1971: #227; Belova 1993: 43, #216 and 45, #267.

**362.3. NAA  $\sqrt{\hat{S}mr}$**  “to accumulate” [GT], represented by Berbero-Semitic match, is presumably the rather remote rhyme-root variation of the preceding trilateral root, cf. Sem.: Ar. šamara I “1. cueillir, ramasser (les dattes), 2. ramasser et réunir sur un point, p.ex., les bouts de sa robe ou ce qui était disséminée” [BK I 1267] || SBrb.: Ayr zāmmār “s’accumuler à l’intérieur (de), profondément (dans, sur), peser (sur)” [PAM 1998: 893].

• **363. PGoemai  $\sqrt{zəm}$**  [GT]: Goemai zom [zəm] “to love, like, agree, believe” [Sirlinger 1937: 285] (Takacs 2004: 424: isolated in AS) | Gwandara žūmá [žu- <  $\sqrt{zu}$ - reg.] “to prefer” [Matsushita 1972: 57] || ECh.: Ubi zom-no “ami” [Alio 2004: 276, #363] < P(W)Ch.  $\sqrt{zVm}$ - “to wish”, also Ch.  $\sqrt{zVn-d}$ - “to want” [CLD III 132, #487] || NOm.: Yemsa zomó [Cerulli, Lamberti] = zomoba [Fisseha] “friend” (Yemsa data: Bender 2003: 340, #37) || Sem.  $\sqrt{z^c m}$  [DRS] (GT: root extension  $\sqrt{-^c-}$ ?): Ar. za<sup>c</sup>ima “désirer ardemment qqc.” [BK I 992] || ES: Gurage žamä “convoiter, désirer ardemment” [DRS 771] vs. Sem.  $\sqrt{z^h m}$  [DRS]: Ar. (dialect of Zaër) žəḥm “désirer ardemment qqch.” [DRS 716 among semantically unrelated *comparranda*] < AA  $\sqrt{z^c m}$  “to like” [GT]. AS-Sem.: Takacs 2001: 80; 2011: 156.

• **364. PAngas  $\sqrt{zim}$**  (?) →  $\sqrt{zəm}$  via  $\sqrt{züm}$  “1. back, 2. shoulder” [GT]: Angas züm “the shoulders, the upper part of back” [Foulkes 1915: 313] = zəm “Schulterpartie, Rücken, Buckel” [Jng. 1962a MS: 45] = zəm “back”, zəm sar “back of hand”, cf. čir zəm “to reject” [ALC 1978: 9, 70] = cf. perhaps tër kà zām kēnī “to help” [Kraft] (isolated in AS: Takacs 2004: 425) || CCh.: Masa  $\sqrt{c/zəḡa}$  “saddle place of horse” [GT]: Lame cəḡā (ts-) “selle (de cheval)” [Sachnine 1982: 400], cf. Lame zəḡā (dz-) “crinière (du cheval)” [Sachnine 1982: 411] || Sem.  $\sqrt{zmm}$ : Ar. (dialect of Syria and Palestina) zamma “(em)porter”, (Maroccan) zəmmāmāt (pl.) “muscles qui serrent le sphincter”, (Marazig) zamm “soulever en un seul bloc par en dessous et emporter (quelque chose de lourd)” (Ar.: DRS 748) || MSA  $\sqrt{zmm}$ : Jibbali zimm “to embrace and lift so. off his feet”, ezmīm “to hold sg./so. on one’s upraised palm at shoulder level” [Johnstone 1981: 319], Mehri zəm “to embrace and lift so. off his

feet” [Johnstone 1987: 468] < CAA \*√zm “to carry on the back/shoulders (?)” [GT]. AS-Sem.: Takács 2001: 80; 2011: 155-156.

The underlying CAA \*√zm “back” [GT] is reconstructible from further derivatives with diverse C<sub>3</sub> root extensions (SBrb. \*-r, Ar. -k and -ḥ):

**364.1. PAA \*√zmk** “back” [GT]: Sem.: Classical Ar. √zmk > zamak- “1. naissance, racine de la queue (chez les oiseaux), 2. queue d’oiseau” [BK I 1012], Maghrebi Ar. √zmk > zanka ~ zbanka ~ zmanka “croupion d’oiseau, postérieur, cul” [DRS 747] || ES: Gurage dialects: Ennemor zäng<sup>w</sup>äd, Endegeny zängod, zong<sup>w</sup>äd, Gyeto zäng<sup>w</sup>ät “buttocks, anus, bottom of a thing” (Gurage: Leslau 1979 III: 711) || NOM.: PMao \*ziŋk/k- “upper back” [GT]: Hozo zi/ŋka “upper back” [Atieb & Bender] = ziŋká “back” [Siebert & Wedekind], Sezo ziŋki “upper back” [Bender & Atieb] = ziŋk/ke “back” [Siebert & Wedekind] (Mao: Bender 2003: 353, #4).

**364.2. PAA \*√VngVr-** “back, bottom” [GT]: Sem.: Gafat azänägärä “to go down” [Leslau 1945: 181] = azänäggärä “descendre” [Leslau 1956: 250; DRS 759]<sup>11</sup> || SCu. \*√zng<sup>r</sup> [GT]: Ma’a mǔ-zǔngǔlǔ “Rücken” [Meinhof 1906: 315] = mzungurú “back” [Ehret 1980: 197, #IV.A.4].<sup>12</sup>

**364.3. Sem.: Classical Ar.** √zmḥ > zammāḥ “anus, cul”, zamwaḥ “marcher en tortillant le derrière” [DRS 746], which may certainly contain the CAA nominal class indicator \*ḥ of anatomical terms (cf. Takacs 1997).

**364.4.** A further triradicalized reflex of the same CAA root may be preserved in SBrb.: EWlmd. & Ayr e-zmār “garrot (partie du dos située en avant de la bosse dans/chez le chameau et où se place la selle), 2. avant-dos (du cheval et des autres grands quadrupèdes)”, ə-zmār “1. supporter, 2. i.a.: être bon marcheur/porteur (bête)” [Alojaly 1980: 214; PAM 2003: 893], although its etymological position is vague.<sup>13</sup>

● **365. Goemai zum** “straps” [Hellwig 2000 MS: 42] (isolated in AS: Takacs 2004: 427) || Sem. \*√zmm “to bind with a rope (?)” [GT]: Syr. zam “lier la vigne”, zāmāmā “lien, mors, bride”, JPAm. z<sup>ə</sup>mam “mettre un mors” | Ar. zamma “lier, attacher, brider un monture, exercer un contrôle”, zimām- “longe, bride, courroie, contrôle” || Eth.-Sem. \*√zmm: Geez zamama, Tna. zāmmāmā “brider, attacher avec une corde la mâchoire inférieure d’une bête”, zāmām “mors aux narines, lien”, (?) Amh. ḡmmat “nerfs, veines, muscles, tendons, cordes de lyre” (ES: DRS 748-749, ZMM1).

**365.1.** Ultimately related to the biliteral root of one of the preceding entries (see there under no. 362), whose Semitic reflex was reconstructed on the basis of further extended derivatives (q.v.) as \*√zm “to bind” [Zaborski 1971: #227] = \*√zm “связывать, сжимать” [Belova 1993: 43, #216] = \*√zm “to tie together” [Ehret 2000 MS: 104, #1487].

<sup>11</sup> For the semantic shift in Gafat cf. e.g. SBrb.: Hgr. tə-zuk “buttock” [Foucauld 1951-2], EWlmd. tə-zuk, pl. ši-zuk-en “fesse” [PAM 1998: 371] || HECu.: Kambatta zakku “after” [Leslau 1980: 120] || NOM. \*zikk-/zukk- “back” [Blazek 1989 MS Om., 5, #4] || WCh.: Ron: Bokkos žáhá [h < \*k reg.] “Gesäß” [Jng. 1970: 143] || ECh.: Jegu zuk ~ zug- “herabsteigen” [Jng. 1961: 118] < AA \*√[ž]k “back” [GT].

<sup>12</sup> Ehret l.c.: ~ Burunge čigara (c-) “sheep’s tail” < SCu. \*zink- “buttocks, hindquarters”.

<sup>13</sup> Cf. alternatively (?) the entry for AS \*zuŋ, from \*\*zum (?) “1. chest”, hence \*pV-zuŋ (mostly prefixed reflexes) “2. heart” [GT] below (entry no. 396).

**365.2.** Root variety with a voiceless sibilant *Anlaut* in WCh.: Pero čámò “rope”, čámù “to make a rope” [Frj. 1985: 24] || Eg. smj “Segelleine” (BD, Wb IV 130, 7) perhaps also smj.w (pl.) “Peitsche (als Gerät zum Prügeln)” (MK, Wb IV 130, 8).<sup>14</sup>

• **366. PAngas \*zum > \*zuŋ** “antelope sp.” [GT]: Angas zung “the H(au)s(a). kanki antelope” [Foulkes 1915: 313] = nzùm “Antilope (Hausa tǎŋkíí)” vs. nzùŋ “Kama, Eng. hartebeest (Hausa kankii)” [Jng. 1962a MS: 46] (isolated in AS: Takacs 2004: 427) < Ch. \*zVm- “kind of antelope, bush animal” [CLD III 133, #493] || SBrb.: EWlmd. e-zām, pl. i-zāmm-ān “antelope oryx” [PAM 1998: 375; 2003: 891] || Sem.: Hbr. zemer “sorte de gazelle” [DRS 752]. AS-Sem.: Takács 2001: 82; 2011: 157.

• **367. AS \*zum → \*zəm** “sort of wasp” [GT]: Angas tang-zum “a wasp” [Foulkes 1915: 288] = ntàŋ-zùm (Kabwir dialect) “a wasp” [Jng. 1962a MS: 29] = ntàŋ-zum “wasp” [ALC 1978: 48], Goemai tang-zoem “a wasp, the small sized one (of reddish colour)” [Sirlinger 1937: 238] (AS: Takacs 2004: 427) | Hausa zùmà “1. honey, 2. honeycomb with honey still in it” [Abraham 1962: 979], Gwandara žúmà [žu- < \*zu- reg.] “honey, bee” [Mts. 1972: 57] || CCh.: Tera žum-di “honey” [Meek] | Bata žuma-tiye “honey” [Mouchet], Bata-Demsa jumathé [žuma-čé] “bee”, žumé “honey” [Strümpell], Bachama žuma-to “bee” [Meek] = nžúmwa-to “bee”, nžúmwa-to “honey” [Skinner] | Mandara nžuwā nāma “bee” [Meek], Glavda nžuyám-āma “bee” [Rapp & Benzig 1968] | Sukur žum-am “bee” [Meek], Gisiga-Dogba zaam-am “bee” [Lukas] (Ch.: JI 1994 II 18-19, 190-191) || ECu. \*zagm- ~/> (?) \*zamm- [epenthetic \*-g-?] “honey” [Sasse 1979: 20, 54, 58] || SCu.: Dahalo nžóme “honey of mǐpēle bee” [Ehret 1980: 201, #5, so also EEN 1989: 46].<sup>15</sup> Cu.-Ch. (without AS): Blažek 1991: 51-52, #31. Ch.-SCu.: Skinner 1996: 300. AS-Sem.: Takács 2001: 81; 2011: 156-157.

• **368. AS \*zum ~ \*zuŋ** “hairstyle” [GT] = \*zuŋ “tuft of hair” [Dlg.]: Angas zung (≈ Hausa zonko) “a tuft of hair on the head” [Foulkes 1915: 313] = nzùm “Haartracht” vs. ŋzùŋ “Haarbüschel, besonderer Haarschnitt, urspr. der Jukun” [Jng. 1962a MS: 30, 46] = zuŋ “tuft of hair” [Hoffmann], Kofyar zuŋ “tuft of hair” [Hoffmann], Goemai zung “the needle on a chief’s head” [Sirlinger 1937: 285] = zuŋ “tuft of hair” [Hoffmann] (AS: Hoffmann 1975: 21, #112) || Sem. \*√zmm ~ \*√zc̣m [GT]: Aram. zemmā, Syr. zəmtā, Mandaean zimta “hair (cheveux)” (NWSem.: DRS 749) || ES: Geez zəʿəme, pl. zaʿāməy “tuft of hair (?)” [Leslau]<sup>16</sup> = frange, touffe de cheveux (?) [DRS], Amharic zoma “long wavy hair” [Leslau] = “longue chevelure ondulée” [DRS] (ES: Leslau 1987: 630; DRS 770-771) < PAA \*√zm “sort of peculiar hairstyle (?)” [GT]. AS-Sem.: Takács 2001: 81-82; 2011: 157.

<sup>14</sup> Its etymology is disputed. C.T. Hodge (1968: 28, #94) equated it with Ch. \*(k-)s-m “skin”, but abandoning this idea, later he (Hodge 1976: 12, #46) he ventured to change it for a comparison to Sem. \*√syb “grey hair” with an apparent hesitation as for the all too vague semantics of this forged Eg.-Sem. match: “at least formally possible”.

<sup>15</sup> Ch. Ehret (1980: 201, #IV.F.5) based his SCu. \*nčōm-+ (\*ts-) “kind of bee” [Ehret] upon the vague comparison of Qwadza camayi-tuko “bee” | Dahalo nžóme “honey of mǐpēle bee”.

<sup>16</sup> Geez zəʿəme is of doubtful meaning, Leslau’s alternative rendering is: “fringe (?)”, some kind of garment (?)”.

• **369. AS \*zum ~ \*zuŋ** “lazy” [GT]: Angas go-zum “idle” (go “person”) [Ormsby 1914: 209] = zum “laziness, lazy” [Foulkes 1915: 312] = zùm “Faulheit, fault” vs. zəŋ (Kabwir dialect) “idle” (≈ Hausa zama baa aiki) [Jng. 1962 MS: 45] = ngo zùm “lazy person” [ALC 1978: 46], presumably Montol ge-zum “patience” (ge- not clear) [Ftp. 1911: 219] (AS: Takacs 2004: 427) < WCh. \*√zm “to get tired” [JS 1981]<sup>17</sup> ||| SBrb. \*√zmr: EWlmd.-Ayr zəməmmər-ət “1. se traîner sur le sol ..., 2. être pénible” [PAM 2003: 893] ||| Sem. \*√zmh: Ar. zummaḥ-, zūmaḥ- “faible, débile” [DRS 746 with semantically unrelated *comparanda*] < PAA \*√zm “to be feeble (?)” (extended with diverse C<sub>3</sub> in NAA) [GT].

• **370. AS \*zūm** (or \*zuṽum?) “to be well” [GT]:<sup>18</sup> Angas zum “prosperity, good health, everything going well” [Foulkes 1915: 313] = zum “Wohlergehen, Gesundheit” [Jng. 1962a MS: 45] = zum “peace”, kaŋ zum “to make peace”, ngo zum “man of peace”, kan (so -n) kò zum “fellowship” [ALC 1978: 24, 46, 70], Mupun zùum “to recover from pain” [Frj. 1991: 70] (AS: Takacs 2004: 426) < WCh. \*√zm “good” [JS 1981]<sup>19</sup> < PCh. \*zVm- “to be (in) good (health), beautiful” [CLD III 134-135, #500] ||| SBrb.: Ahaggar zemzem “être épanoui (de joie, le sujet étant le visage d’une personne), s’épanouir (de joie) (exprime exclusivement l’épanouissement du visage produit par la joie, non celui de la jeunesse, ni de la beauté; se dit de n’importe quelle personne, jeune ou vieille, belle ou laide, dont la joie est peinte sur le visage; peu usité)” [Foucauld 1951-2: 1971].

• **371. Suroid \*zan** “to stretch out” [GT]: Sura zan “ausstrecken (Beine, Arme)” [Jng. 1963: 89], Mushere zan “to straighten” [Jng. 1999 MS: 20] ||| Eg. zn “öffnen” (PT, Wb III 454) ||| Sem.: Ar. √zn? I: zanaʔa “7. être resserré, étroit”, √znw: zanā “être resserré, étroit (d’un lieu)”, zaniyy- “étroit” [BK I 1015, 1018, cf. DRS 760] < PAA \*√zn “1. to stretch out, 2. straighten out” [GT]. AS-Sem.: Takács 2001: 78; 2011: 155.

• **372. Suroid \*zʷan ~/> \*ʒʷan** “to comfort in order to influence” [GT]: Sura ʒʷaan (so, long -aa-) “in Versuchung führen, täuschen” [Jng. 1963: 68], Mupun ʒʷáŋ “1. to comfort, touch tenderly, 2. influence” [Frj. 1991: 24], Kofyar zuwan “to comfort” [Netting 1967: 46], Mushere ʒʷan ~ nʒʷan “to cool down, calm down somebody while crying or when in sorrow or a difficult situation” [Diyakal 1997 MS: 103] (Takacs 2004: 429: isolated in AS) ||| SBrb.: EWlmd. ə-zzən, Ayr. ə-žžən [regular < \*ə-zwən] “1. jouer avec excès, avec une gaieté folle, 2. plaisanter, être gai, joyeux, 3. être railleur, taquin, railler, taquiner, insulter (qqn.)” > EWlmd. ä-mazzan, Ayr. ə-mužān “1. blagueur, homme qui plaisante toujours, 2. railleur, taquin” [PAM 1998: 376; 2003: 893-894] ||| Sem.: Gurage dialects √zwn “to be gay” [GT]: Ennemor, Gyeto (a)zwāñā, Endegeny azwāññā “to be beautiful, pretty”, Gyeto azwāñā, Endegeny azwāññā “to be glad, rejoice, be pleased, satisfied, like” [Leslau 1979 III:

<sup>17</sup> Affiliated by Ch. Ehret (2000 MS: 486, #3259) with Sem.: Ar. dāmt- “to emaciate” < AA \*-dz-m- “to weaken, wear out”.

<sup>18</sup> Cf. AS \*zuṽum “cold” [GT] (q.v. above in the entry no. 341 of part X of this series)?

<sup>19</sup> Affiliated by Ch. Ehret (2000 MS: 2081, #1983) with Ar. dīmar- “right, law, good fortune”, dīmr- “brave, prudent”, LECu.: Oromo simb-ō “pleasing or imposing quality” < AA \*-ʒ/ʒim- “right, correct, proper”, which is either semantically (Ar.) or phonologically (Oromo) unlikely.

717] = “être beau, joli, être content” [DRS 706: isolated in Sem.] < PAA  $\sqrt{3}wn$  “1. to be gay, 2. make/be pleasant” [GT].<sup>20</sup> AS-Sem.: Takács 2001: 83; 2011: 157. Is LEg. zn [GT:  $\sqrt{3}znj$  <  $\sqrt{3}wn$ ?]<sup>21</sup> “tanzen vor (n) jem.” (GR, Wb IV 155, 2) eventually also related?<sup>22</sup>

● **373. Goemai zwan** “to surpass” [Sirlinger 1937: 287] (Takacs 2004: 429: isolated in AS) || ECh.: Mokilko  $\text{ʔ}òzzínè \sim \text{ʔ}ízzínè$  [GT: <  $\sqrt{3}i/o-z^{wn}in-e$ , i.e.  $-zz-$  <  $\sqrt{3}zw-$  as in Brb.?] “passer, rester une année quelque part” [Jng. 1990: 159] || Eg. znj “vorbeigehen (LP-GR: von der Zeit)” (PT, Wb III 454-456) = znj “to pass (by), surpass, transgress” (OK-, FD 229): regular <  $\sqrt{3}zwn$ <sup>23</sup> [GT] || Sem.: no evident cognates<sup>24</sup> < AA  $\sqrt{3}wn$  (var.  $\sqrt{3}zyn$ ?) “to pass by” [GT]. AS-Sem.: Takács 2001: 83; 2011: 157.

● **374. AS  $\sqrt{3}w\tilde{a}n$**  “hook” [GT]: Kofyar zuwan “hook” [Netting 1967: 46], Goemai zwaan “a fishing hook” [Sirlinger 1937: 286] = zwaan “hook” [Hellwig 2000 MS: 42] (AS: Takacs 2004: 429) || NOM.: Dache zu’n- “hoe” [Fleming apud Bender 2003: 318, #44] || LEg. zn (determinative of metals) “Pflugschar” (GR, Wb III 458, 3)<sup>25</sup> > Coptic (SA) **CINE**, (B) **CHINI** “ploughshare” (CD 343b; CED 155 pace Dümichen (1866: 84) = “Pflugschar” (KHW 188).

● **375. PGoemai  $\sqrt{3}w\tilde{a}n$**  [GT]: Goemai zwaan “to take off a bit, snatch a bit (off the meat), cut off a bit (of meat), pinch some (of fufu)” [Sirlinger 1937: 286] (Takacs 2004: 429: isolated in AS) || SBrb.: EWlmd.-Ayr zänn-et<sup>26</sup> (adv.) “1. (tout à fait) à part (une chose à part), (tout) différent, 2. d’autre part” [PAM 2003: 896] || Eg. zn (in fact,  $\sqrt{3}znj$ , Wb: “Inf. weiblich”)<sup>27</sup> “1. gewöhnlich: (Köpfe, auch die Nacken) abschneiden (PT-), 2. ungewöhnlich: (die Eingeweide) zerschneiden (NK royal tombs), 3. (die Feinde) töten (GR)” (PT-, Wb III 457, 17-21).<sup>28</sup>

<sup>20</sup> Remotely related to AA  $\sqrt{3}zyn$  “good” [GT] examined s.v. AS  $\sqrt{3}zēzn$  “truth” [GT] (above)?

<sup>21</sup> For the regular match of Egyptian IIIae inf. roots corresponding to Semitic/Berber hollow roots, cf. Vycichl 1953. Its comparison with CCh.: Gude ūcéná (-ts-), Nzangi ućené “to dance” [Strümpell] may be misleading, cf. Guduf  $\sqrt{3}cg^{wn}$  [IL], which forecasts a trilateral root in the Bata group (cf. JI 1994 II 101).

<sup>22</sup> For the semantical connection, cf., e.g., Eg. jb3 “to dance” vs. Sem.: Macro-Canaanite  $\sqrt{3}ybl$  “to jubilate”.

<sup>23</sup> For the regular concordance of Eg. IIIae inf. roots with Semitic hollow ones see Vycichl 1953.

<sup>24</sup> Cf. perhaps Ar. zyn: zāna “pousser devant soi”, zāyana “chasser, éloigner qqn.” [DRS 726]?

<sup>25</sup> Based upon A. Ember’s suggestion (quoted by W. Spiegelberg in his 1921 KHW and by W. Westendorf in his 1977 KHW 188), Eg.  $\sqrt{3}sn$  (metal determinative) “Pflugschar” (GR, Wb III 458, 3) > Coptic (SA) **CINE**, (B) **CHINI** “Pflugschar” (CED 155; KHW 188), however, finds a perfect match in Sem.: Ar. sinn-at- “1. bec de la plume, du roseau à écrire, 2. soc de la charrue, 3. hache à deux tranchants” [BK I 1147] || CCh.: Mbara sì:nà “iron” [TSL 1986: 289] || ECh.: perhaps Bidiya sárnà “iron” [AJ 1989: 113], cf. EDE II 125. G. Takács (1998: 157, #16), in turn, did not exclude a relationship between the Late Egyptian term and the Berber word for “iron”.

<sup>26</sup> For this adverbial ending one may compare the case of Eg. wr “great” > wrt “greatly”.

<sup>27</sup> Following the hypothesis elaborated by W. Vycichl (1953), may we see here the regular match of Eg. IIIae inf.  $\sqrt{3}znj$  = Sem. *mediae inf.* (i.e., the “hollow”) roots?

<sup>28</sup> Affiliated by C.T. Hodge (1968: 25) with Sem.: Akk. zenû “wrath, hate” and Ar.  $\sqrt{3}dnb$  IV “to do wrong, commit a crime”, which are not even with one another related. Ch. Ehret (1995: 273, #502), in turn, derived it from his AA  $\sqrt{3}c\tilde{a}n$ - “to split in two, one from the other”. Later, however, Ehret (2000 MS: 536, #196) changed his mind and affiliated it with PSem.  $\sqrt{3}zl$  “to cut”, PCu.  $\sqrt{3}d/zalā$ - “to gash, notch” etc. < AA  $\sqrt{3}zāl$ - “to cut (into, off)”.

● **376. PGoemai zen** “to start together, do a thing together, at the same time” [Sirlinger 1937: 284] (Takacs 2004: 424: isolated in AS) || CCh.: Munjuk-Pouss zɪŋgi (zəŋga) (velar root extension?) “ressembler” [Tourneux 1991: 129] || Eg. zn “herankommen an, nacheifern (r)”,<sup>29</sup> more precisely: “1. (MK, XVIII.: den Vorfahren, dem was was ein anderer getan hat) herankommen an, nacheifern, 2. (GR) ähnlich sein, gleichen, ähneln, 3. (XVIII.: den Gesetzen) nachleben” (MK-, Wb III 456-457) > compound prep. m-zn.t-r “in der Art von, nach Art von, wie” (MK-, Wb III 457, 3-6) = znj (IIIae inf.) “gleichen, ähneln, ähnlich sein” (V-VI., ÄWb I 1149) = snj (sic, IIIae inf.) “to be like, resemble (r), copy, imitate (r), conform to (r) laws” > m-zn.t-r “in the likeness of, in accordance with” (EG §180 > FD 230).

● **377. Goemai zen** “wrongness, incorrectness” [Sirlinger 1937: 284] (isolated in AS: Takacs 2004: 424) || Eg. jzn.w [regular < \*zin-]<sup>30</sup> “etwas Böses was man tut” (PT, Wb I 129, 18; GHwB 103) < AA \*zɪn- “wrong” [GT]. AS-Sem.: Takács 2001: 79; 2011: 155.

● **378. AS \*zē₂n ~ \*sē₂n (?)** “1. truth, 2. truly” [GT]: Angas zin “true, certainly” [Ormsby 1914: 208, 315] = ziin “true, truth” [Foulkes 1915: 312] = zɪn (Kabwir dialect) “truth, true”, nzɪn “truth” [Jng. 1962a MS: 45-46] = nzin “truth”, cf. pən nzin “to believe” (pən “to give”) [ALC 1978: 49, 52] = nzin “truth” [Kraft], Sura a zéen-zéen “fürwahr” [Jng. 1963: 58] = sēen (so, s-) “truth” [Kraft], Mupun zēen “truth”, zēn-zēen “very truly” [Frj. 1991: 69], Kofyar sēn sēn (so, s-) “truth” [Netting 1967: 35], Mushere zēen “truth” [Diyakal 1997 MS: 341] = zēn “truth”, cf. zēen “lesson” [Jng. 1999 MS: 20], Chip zen “truth” [Kraft], Goemai sēn (adv.) “indeed” [Sirlinger 1937: 201] = nseen (adv.) “truly” [Hellwig 2000 MS: 26] (AS: Takacs 2004: 424) | Bole-Tangale \*zina “good” [GT]: Maha zinaŋ [Newman], Ngamo zina [Newman] = zɪnâ [Kraft] (Bole-Tangale: Newman 1965: 58) || CCh.: perhaps Munjuk-Pouss zizini (zəzəna) “1. ranger, mettre en ordre, 2. réparer, entretenir” [Tourneux 1991: 129]<sup>31</sup> < Ch. \*zVn- “true, certain” [CLD III 139, #530] || NOm.: Mao-Bambeshi zɛpá “straight” [Siebert & Wedekind] (isolated in Mao apud Bender 2003: 358, #94) || Eg. jzn.w [Belova: regular < \*√zyn] “etwas Gutes oder Freundliches” (PT, Wb I 129, 17) || Sem. \*√zyn “to be good” [GT]: East Ar. dials. zeyyin, Iraqi Ar. zayn “good, nice” [Durand 1995: 150] || MSA \*√zyn [Johnstone]: Harsusi zēn “good”, en-zēn “good, all right” [Johnstone 1977: 150], Jibbali zēn “to become beautiful”, ztīn “to be in good health, improved health” [Johnstone 1981: 322] || ES: Amharic zäyyänä “to be beautiful” [Leslau] = tä-zayyänä “être beau, brave, fort” [DRS] (Sem.: DRS 762) < PAA \*√zyn “1. good, 2. correct, true” [GT].<sup>32</sup> AS-Sem.: Takács 2001: 79-80; 2011: 155.

<sup>29</sup> Wb I.c.: “identisch mit dem vorstehenden Wort”, i.e., Eg. znj “vorbeigehen”, which is certainly a popular etymology.

<sup>30</sup> PAA hollow roots regularly correspond to Egyptian Iae inf. according to Belova’s law (cf. EDE I 394-400).

<sup>31</sup> But cf. also Munjuk-Puss zire (m) “vérité” [Tourneux 1991: 129] and Munjuk-Puss ziri (zara) “aligner” [Tourneux 1991: 129] where a shift of Musgu r < \*n can be pointed out.

<sup>32</sup> The Eg.-Ar. comparison was first suggested by A.G. Belova (1987: 279; 1989: 13; 1991: 85, #3; 1993: 50, #3).

● **379. Kofyar zené** (sic, GT: borrowed word?)<sup>33</sup> “story” [Netting 1967: 46] (Takacs 2004: 424: isolated in AS) | Hausa mún zàntáá dà šíí “we conversated with him”, zàncéé, pl. zántú(ttú)kà, Sokoto dialect: zántúkkà “1. conversation, 2. affair” [Abraham 1962: 966-967] | WBade zènu “to say, tell” [Dagona 2004: 84], Ngizim zónzèn “riddle, tale (a story teller or riddler says zónzèn ‘here’s a tale/riddle’, and the listeners answer áśásá ‘let’s hear it’; folk-tales are also sometimes introduced by the phrase ‘here’s a tale about X’)” [Schuh 1981: 181] < WCh. \*zVn- “to tell” [CLD III 137, #517] || (?) Eg. znn “Aktenstück, Buch: 1. Aktenstück, Verzeichnis: a) (mit genitivischem Zusatz:) Bericht über ... (die Ernte, die Lieferungen u.ä.), b) (ohne solchen Zusatz, auch mit m davor:) als Aktenstück, aktenmässig (mit rdj, jrj), 2. auch von Büchern (selten)” (MK-, Wb III 460, 1)<sup>34</sup> || Ethio-Sem. \*z-n- “story, news, fame” [Skinner] = \*√znw “to announce one’s reputation” [GT]: Geez zenāwā “to announce”, zena “message, story”, Tigre, Tna., Amh. zena “reputation, story”, Gurage: Soddo dialect zena “(life) story, tale, reputation”, zənnā “reputation” (ES: Leslau 1979 III: 710: isolated in Sem./Ethiopian; DRS 754)<sup>35</sup> vs. Ethio-Sem. \*√zn(z)n “to discuss” [GT]:<sup>36</sup> Tna. zanzan tābahalā “to argue, fight with one another (Leslau), discuter, se disputer (DRS)”, Gurage dialects: Selti, Wolane zännā “argument, animosity (Leslau), discussion, animosité (DRS)” (ES: Leslau 1979 III: 710: isolated in Sem./Ethiopian; DRS 754). Borrowing from ES unlikely. There must have been an ancestral root, sg. like PAA \*√zn “to give an account” [GT]. For WCh. (Hausa, Kofyar, Ngizim)-ES see Skinner 1996: 296 with a couple of semantically unrelated parallels. The Kofyar-ES match was observed by the present author independently.

**379.1.** The same biradical root seems to be retained as extended by a velar C<sub>3</sub> in Ethiopian \*√3ng “to tell” [GT], cf. Ethio-Sem.: Gurage \*√zngy (or \*√zngl covering some of the derivatives) [Leslau] = \*√zngʔ/c [DRS]:<sup>37</sup> Tna. zənāggʔa “parler (DRS)”, Chaha, Ezha, Ennemor, Gyeto, Muher, Mäsqän, Goggot zānga, Endegeny zāngä “affair, matter, public discussion,

<sup>33</sup> The final -e attached to the CVC root (so typical of native ones) in the AS stem is unusual, which can suggest a loaning from some neighbouring West Chadic source language.

<sup>34</sup> Provided, of course, it is not derived from Eg. znj “herankommen an, nacheifern (mit r)” (MK-, Wb III 456-457).

<sup>35</sup> In the view of W. Leslau (l.c.), the derivation of the Geez word from \*senāwā in comparison with Syr. tēnā and Ar. ṭannā “to tell” as suggested in Praetorius (1890: 33), “is unlikely”.

<sup>36</sup> The Ethio-Semitic *verba dicendi* were affiliated in the DRS l.c. with a SSemitic onomatopoeic root expressing murmuring of the insects, which would need further justification: “... formes, pour la plupart sans parenté directe, qui semblent être fondées sur la valeur onomatopéique de ce radical”, which, still, its editors did not hesitate to combine with Berber: “cette racine onomatopéique se trouve aussi en berb(ère), sans qu’il soit possible d’affirmer autre chose qu’une rencontre”, cf. EBrb.: Ghadames zənzən “résonner” [Lanfry 1973: 428] || NBrb.: Mzab zzənzən “bourdonner, vibrer”, bu-zənzən “guêpe, frelon” [Delheire 1984: 252] | Qabyle zzənzən “bourdonner”, zzənzən “résonner, vrombir”, zuzən “bercer” [Dallet 1982: 949: printed -e- for the -ə-].

<sup>37</sup> W. Leslau (1979 III: 711) was somewhat puzzled on the ambiguous root behind the evident common Gurage derivatives: “the root seems to be zngy even though no comparison is available from the other Ethiopian languages. The nominal derivations, however, present problems.” Alternatively, Leslau pondered reconstructing \*√zngl, which “could not easily explain” some other nominal reflexes (q.v.). W.W. Müller (1981: 403), followed by the DRS 757 (rejecting the “rapprochements phonétiquement très difficiles” in Dillmann 1865: 1055) with right doubts, in turn, treated the Gurage forms in the wider context of ES \*√zngʔ/c “être fou”, which, even in spite of Müller’s semantical parallels like Ar. harāga “parler de manière incohérente” and Mehri herūg “parler”.

argument”, Muher, Mäsqän, Goggot zənägg’ä, Endegeny zənekkä, Ezha zərägg’ä, Chaha, Gyeto zəräk’ä “to speak, talk”, Goggot tä-znagg’ä “to converse, chat” etc. (ES: Leslau 1979 III: 711: isolated in Ethiopian) ||l NAgaw \*žij- (Apl.: \*ž-) “to talk, tell, story” [Apl. 2006: 76, 158]: Bilin žija “conversation”, hence denom.: žij-əst- (Apl.: ž-) “to talk, converse” [Apl.], Hamta žiñ- “erzählen” [Reinisch], Hamta žiñä [Reinisch] = žija “gossip, story, news”, hence denom.: žij-z- “to tell, relate” [Apl.], Qwara žəŋa “story, tale” [Apl.] (NAgaw: Apl. 2006: 76, 132-133).

● **380. Goemai zun** “elephant tusk” [Hellwig 2000 MS: 42] (Takacs 2004: 424: isolated in AS) || CCh.-ECh. \*√ž(w)n “elephant” [GT]<sup>38</sup> > i.a., CCh. \*žuHwan- [Orel 1993: 42]: PTera \*žuwan > \*čuwan “elephant” [GT based on Kraft 1981; JI 1994 II 124 q.v.] | PBura-Margi \*či/uwar (regular rhotacism of \*n > r in Bura-Margi) “elephant” [GT based on Kraft 1981 q.v.; JI 1994 II 124-125] | PHigi \*či/uwe (loss of \*-n?) “elephant” [GT based on Kraft 1981 q.v.; JI 1994 II 125] || ECh.: PLay \*ženU > \*žUnU “elephant” [GT based on Lukas 1937: 87, 89, 92; JI 1994 II 125 q.v.] ||l NAgaw \*žān-ā “elephant” [GT]<sup>39</sup> || HECu. \*zān- [GT pace Leslau 1980: 120] = \*žān-e (\*dz-) “elephant” [Hudson 1989: 408] ||l Sem.: possible traces of \*,trunk” (???) in Ethio-Semitic.<sup>40</sup> NAgaw-CCh.: Müller 1975: 67, #46. Agaw-Ch.: HSED 552, #2658 („Apparently, this is a cultural word with a complicated history of borrowings from one group to another”), but more notably: Blažek 1994: 199 with a thorough presentation of all the numerous further varieties (with a velar C<sub>2</sub>) of this North African *Wanderwort*, whose Ethiopian reflexes were discussed as early as in Müller 1893: 316-317; 1896: 203-205.

● **381. AS \*za(la???)ŋ → PAngas \*zaŋ vs. Suroid \*zəlaŋ ~ \*zaləŋ** “1. youth, 2. young man” [GT]: PAngas \*zaŋ [GT]:<sup>41</sup> Angas zang (so, without -l-) [erosion < \*zaləŋ???) “1. a youth (male), 2. time of youth (it also corresponds to our ‘rashness of youth’)” [Foulkes 1915: 312] = zəŋ (Kabwir dialect) “1. rashness of youth, time of youth, 2. a young man (cp. female riip), 3. childish”, ’gyām zəŋ (so, with -l-) (Kabwir dialect) “young (handsome) man” (’gyām “child”) [Jng. 1962a MS: 45] vs. PSuroid \*zəlaŋ “youth” [GT]: Sura zələŋ “junger Mann” [Jng. 1963: 89], Mupun zləŋ “young man”, dyèp zləŋ “young man, fiancé” [Frj. 1991: 13, 69], Mushere zalang “youth” [Diyakal 1997 MS: 341] ||l SCu.: Qwadza cenegayo (ts-) “just-circumcized youths” [Ehret 1980: 355, #III.C.10]<sup>42</sup> ||l perhaps SBrb.: EWImd. a-znəy, pl.

<sup>38</sup> The Proto-Chadic reconstruction is disputed: \*g-w-n (NM 1966: #27). ECh.:

<sup>39</sup> The Proto-Agaw reconstruction is disputed with regard to Hamir zəhón [Reinisch 1884: 252] and Awngi ziyoni [Fleming], which suggest an internal extra back consonant: \*žahna vs. \*žahûn (Reinisch apud Müller 1893 and 1896 l.c.), \*žak(V)n- (Appleyard 1984), \*žahñ- (Ehret 1987: 66), \*žihun- (Orel 1993: 42).

<sup>40</sup> Cf. perhaps also: Amharic zänäzänä, Gurage dialects: Chaha, Ennemor, Gyeto zänzänä, Endegeny zänzänä, Ezha zärzänä “tube of the smoking pipe (Leslau), tuyau de pipe (DRS)” (ES: Leslau 1979 III: 712; DRS 761)? According to Dästa Täklä Wäld (1970: 501), followed by W. Leslau (l.c.) and the DRS (l.c.), this is to be explained “as coming from the tree called” zänäzänä.

<sup>41</sup> Equated by N. Skinner with Nbauchi \*zakwat- “youth” [Skinner 1977: 49]. The Chadic parallels listed there by N. Skinner (q.v. in l.c.) are phonologically untenable.

<sup>42</sup> Ch. Ehret (l.c.) assumed in Qwadza a metathesis of an earlier \*çigena (ts’-), stem plus \*-ena plural, on the basis of its supposed derivation from his PRift \*c/çig- (ts/ts’-) “offspring, young”, a possible ghost-root based on its comparison to Iraqw cigan (ts-) “young locusts” (Rift: Ehret 1980: 355, #III.C.10).

i-znəy-ăn “nouveau-né, bébé” [PAM 1998: 377; 2003: 895] < CAA \*√znk (or \*-Q) “young” [GT]??? AS-Sem.: Takács 2001: 79; 2011: 155. The emergence of the strange dichotomy of Angas \*zaŋ vs. Suroid \*zalaŋ “youth” [GT], both having sprung apparently from the very same AS root, is puzzling. Erosion of AS \*zal(a)ŋ > in Angas? Or, *vice versa*, secondary \*-l- extension in the Suroid reflexes? (q.v.)

• **382. AS \*zaŋ** “barren, sterile” [GT]: Kofyar záng “sterile” [Netting 1967: 46], Goemai zang “sterility” [Sirlinger 1937: 284] = zaŋ (referring to humans, animals, land), mat gə zaŋ “barren woman” [Hellwig 2000 MS: 42] (AS: Takacs 2004: 422) || Eth.-Sem.: Amharic zanga “châtré (boeuf, cheval)” [Guidi 1901: 623 quoted in DRS 757, ZNG6: isolated in Sem.]. The underlying PAA \*√zng “sterile” [GT] may have been ultimately derived from a biradical root by addition of a velar C<sub>3</sub>, cf. perhaps NBrb.: Ait Ammart zeyin “châtrer” [Renisio 1932: 320].<sup>43</sup> This is a new etymology of the AS root.<sup>44</sup>

• **383. PAngas \*zaŋ** “(to) adorn(ament)” [GT]: Angas zang “an ornament”, riip po zang “a girl is adorning herself” [Foulkes 1915: 312] = zàŋ (Kabwir dialect) “to adorn” [Jng. 1962a MS: 45] = (???) mbi-zalŋ (so, with -l-!) “make-up in preparation for dance” (lit. “decoration”? cf. bi ~ mbi as prefix “thing”) [ALC 1978: 37]: perhaps lit. “thing of dance” or “of decoration”? (GT)<sup>45</sup> (isolated in AS: Takacs 2004: 422) | Hausa zāánà “1. to draw (line, pattern, picture), ornamented (wall, gourd, etc.) with design, 2. mark, 3. cut tribal-marks, 4. counted-up (persons or things, not figures)” [Abraham 1962: 966] = zaana “to draw, outline, sketch, decorate” [Skinner] || Sem. \*√zyn: Akk. (bab. lit.) zaʾānu → zānu “ausgestattet, geschmückt sein” [AHW 1499] || Ar. √zyn I: zāna “orner, embellir, parer, décorer”, zayn- “ornement”, zīn-at- “ornement, éclat, lustre” [BK I 1034] | MSA: Jibbali √zyn: zēn “to become beautiful”, šēzīn “to wear beautiful ornaments, clothes” [Johnstone 1981: 322], Soqotri √zyn > \*zen “orner” [Leslau 1938: 152] || ES: Geez √zyn: zena “to decorate” [Leslau 1987: 646]. Hausa-Sem.: Skinner 1996: 296 (with false Eg. parallel); AS-Sem.: Takács 2001: 78-79; 2011: 155. In this case, the historical reasons of the AS \*-ŋ are perhaps less clear (than normally, when it derives from the junction of a nasal + back consonant) as AS \*-ŋ < \*-yn ~ \*-ny has not been observed elsewhere.

<sup>43</sup> Unless it represents a semantical shift of the root attested in NBrb.: Senhazha e-zzin < \*e-zyin “beauté”, Taghzut me-zian, fem. me-ziana “beau, belle” (as suggested by A. Renisio l.c.) borrowed from Arabic, cf. Egyptian and Sudanese dialects zayyan “raser, couper les cheveux”, Maghrebi Ar. zyāna “circoncision”, Hassaniya zyāne “circon-/excision clitoridienne”, whose Semitic cognates display a similar semantical variation, cf. Geez zayyana “couper les cheveux” (Sem.: DRS 726, ZYN1).

<sup>44</sup> The AS root was first affiliated by G. Takács (2001: 79) with Sem. Ar. zummaḥ- ~ zawmaḥ- “faible, débile et méprisé à cause de sa faiblesse ou de sa petite taille” [BK I 1009, cf. DRS 746]. But, for this latter rare root, cf. perhaps better the entry no. 369 below for AS \*zum ~ \*zuŋ “lazy” [GT]. The Amharic parallel, even if isolated in Semitic, seems at the moment to offer a much better candidate for cognacy with the AS root. isolated Note that SBrb.: Ayr & EWlmd. a-zəm “castrer, châtrer (par coupure)” [PAM 2003: 892] would be tempting to compare, but it apparently evolved secondary from a primary sense carried by EWlmd. √zmm > zāmm-āt “donner un coup de pilon”, tā/tə-zamm-at, pl. ši-zamm-at-en “coup donné avec un pilon/objet lourd” [PAM 1998: 375; 2003: 892], whose cognates are discussed under AS \*zʷaŋ ~/> \*zUŋ “to pound, thresh” [GT] (item no. 367).

<sup>45</sup> Cf. alternatively Angas \*zaŋ “to dance” [GT], where the same question of an inetymological parasitic -l- appears?

● **384. Angas zang** “ridicule” [Foulkes 1915: 312] (isolated in AS: Takacs 2004: 422) || Sem. \* $\sqrt{\text{zng}}$  [DRS]: Geez zang<sup>w</sup>ang<sup>w</sup>a “to mock, deride, ridicule, hold in scorn, jeer, make a laughing-stock of, taunt, reproach, criticize (Leslau), murmurer, moquer, ridiculiser (DRS)”, Amh. zəng<sup>w</sup>ag<sup>w</sup>e “mockery, veiled insult (Leslau), moquerie, insulte voilée (DRS)” (ES: Leslau 1987: 641; DRS 758: isolated in Sem.)<sup>46</sup> < PAA \* $\sqrt{\text{zng}}$  “to mock” [GT]. AS-Sem.: Takács 2001: 79; 2011: 155.

● **385. Kofyar záng** “jar for separating itile oil (of paat tree)” [Netting 1967: 46] (isolated in AS: Takacs 2004: 422), cf. variety with ž- in Kofyar žáng “calabash (drinking)” [Netting 1967: 16]: may be etymologically related to SAA \* $\sqrt{\text{zung}}$ -(Vr)- “sp. of gourd” [GT],<sup>47</sup> cf. SCu.: Ma’a i-zunge [-Ø < \*-r# regular] “cucumber” [Ehret 1974 MS: 75] || WCh.: Hausa zùṅgùrúú “long gourd (worn on arm by women to protect newly-hennaed hands)” [Abraham 1962: 980] || CCh.: Higi-Kamale gwnzɪ [met. < \*zing<sup>w</sup>i, without suffix \*-Vr] “melon” [Kraft 1981: #227]. **385.1.** Perhaps a biliteral root variety of the same root is preserved in PCh. \* $\sqrt{\text{zVn}}$ - “(gourd) laddle” [CLD III 138, #522] = \* $\sqrt{\text{žn}}$  [GT], cf. esp. ECh.: Mubi-Toram \*žēnV “calabash” [GT: < Ar.?]: Mubi žēnɪ ~ žōnɪ (m), pl. žàwàanú “cuillère (en calebasse)” [Jng. 1990 MS: 25], Birgit žēnɔ (m), pl. žēnây “petite calebasse” [Jng. 2004: 354] || SBrb.: EWlm.-Ayr a-zənu, pl. i-zəna “1. calebassier (*Lagenaria vulgaris*), 2. courge d’azənu, courge bouteille (comestible), 3. calebasse à goulot, bouteille (comestible, faite de cette courge; sert à conserver le lait et à battre le beurre), 4. (EWlmd.-Ayr) petit tambour (fait d’une calebasse, tapé à la main)” [PAM 1998: 376; 2003: 894] || Eg. zwn.w (usually written znw) “Art Gefäss (grosser Topf)” (OK, GR, Wb III 427, 16) = zn.w “ein Bottich (ohne Henkel, in verschiedenen Formen und Grössen)” (GHWb 716) < PAA \* $\sqrt{\text{žn}}$ (C<sub>3</sub>?) “sort of calabash (?)” [GT].

● **386. AS \*zaŋ** “to dance” [GT]: Kofyar zang “wedding dance” [Netting 1967: 46] (Takacs 2004: 422: isolated in AS), cf. (???) Angas mbi-zalŋ (so, with -l-!) “make-up in preparation for dance” (cf. bi ~ mbi as prefix “thing”) [ALC 1978: 37]: perhaps lit. “thing of dance” or “of decoration”? (GT)<sup>48</sup> | Gera swam “to dance” [Gowers in JI 1994 II 100] || PAGaw \*žəm- (Apl.: \*ž-) “to sing, dance” [Apl. 2006: 158]: NAGaw: Hamta gim- (sic: g-)<sup>49</sup> “cantare” [CR] = žim- (Apl.: j-) “to dance (and sing)” [Apl.], Kaĩlɪnya žəm- (Apl.: j-) “to dance (and sing)” [Apl.] || SAGaw: Awngi (Awiya) ġəm- (Apl.: jem-) “cantare in danza” [CR] = žəm- (Apl.: j-) “to dance (and sing)” [Apl.] (Agaw: Apl. 2006: 51) || ES \* $\sqrt{\text{zmw}}$  [DRS]: Geez zemā “religious chant” [Apl.] = “mélodie, chant” [DRS], Tna., Amharic, Gurage zema “mélodie, chant” [DRS] (ES: DRS 745).<sup>50</sup>

<sup>46</sup> The equation with AR. zayzaya “se moquer de” suggested in Dillmann (1865: 1058) was abandoned in DRS l.c.

<sup>47</sup> Cf. also WCh.: Bole-Tangale \*sVng- “melon” [GT]: Ngamo šenžɪ, Pero čonžɪ, Tangale yəngu [y- regular < \*s-] (BT: Kraft 1981: #227)?

<sup>48</sup> Cf. alternatively Angas \*zaŋ “(to) adorn(ament)” [GT], where the same question of an inetymological parasitic -l- appears?

<sup>49</sup> D. Appleyard (l.c.): “with an apparently depalatalized initial.”

<sup>50</sup> D. Appleyard (l.c.): “which has cognates elsewhere in Semitic”, i.e., onomatopoeic words like Hbr. zāmam “to buzz, murmur”, Ar. zamzama “to hum” etc.

**386.1. N/P<sup>???</sup>AA \*√zmr** “1. to play music, 2. make happy noise” [Cohen] may be a C<sub>3</sub> root extension of the same onomatopoeic root, cf. SCu.: Ma’a izumarī “flute” [Ehret 1980: 201, #IV.F.6]<sup>51</sup> || LEg. zm3 “Jubel, Freude” (GR, Wb III 452, 1) vs. zm3 “Lunge” (PT-, Wb III 445-446) || Sem. \*√zmr “faire de la musique” [Cohen] = “to blow, make music” [Hodge]. Further details on this Eg.-Sem. match: Hodge 1990: 646, #15.B.

**386.2.** Alternatively, the AS root may perhaps be affiliated with LEg. zn (or sn) “tanzen (n: vor jem.)” (GR, Wb IV 155, 2)<sup>52</sup> || SBrb.: EWlmd. ə-zzən [\*-zwVn- > regular -zzVn-] “1. jouer avec excès ou une gaieté folle, 2. plaisanter, être gai ou joyeux, 3. être railleur, taquin, 4. railler ...” [PAM 2003: 893] || Eth.-Sem.: Gurage dialects \*√zwn “to be gay” [GT]: Ennemor, Gyeto (a)zwāñä, Endegeny azwāññä “to be beautiful, pretty”, Ennemor, Gyeto azwāñä-, Endegeny azwāññä- “to be glad, rejoice, pleased, satisfied, like” [Leslau 1979 III: 717: isolated in Sem.] = azwāñä “être beau, joli, content” [DRS 706, ZWN7: isolated in Sem.].<sup>53</sup>

• **387. Goemai zaŋ** “stranger, alien” [Hellwig 2000 MS: 42] (isolated in AS: Takacs 2004: 422) || perhaps SBrb. \*a-zəŋg<sup>y</sup>u “enemy” [GT]:<sup>54</sup> Ayr a-zəngu, pl. i-zəŋga “ennemi” [A. Basset apud Prasse], Wlmd. a-zəngu, pl. i-zəŋga “ennemi” [Nicolas apud Prasse], EWlmd.-Ayr a-zəngo, pl. i-zəŋga “ennemi” [PAM 2003: 895], Taneslemt a-šəŋg<sup>y</sup>u, pl. i-šəŋga “ennemi” [Evangile selon Matthieu apud Prasse], Ghat zəŋg<sup>y</sup>u, pl. i-zəŋga “ennemi” [Nehilil apud Prasse], Ahaggar ā-həŋg<sup>y</sup>u, pl. i-həŋga “ennemi” [Prasse] (SBrb.: Prasse 1969: 60, #311).

• **388. PGoemai \*zaŋ** (eroded from \*zalaŋ?): Goemai zang-lip “rust” (cf. perhaps lip “red earth”) [Sirlinger 1937: 284], presumably cognate with Angas \***ṣaṣlaŋ** (or \***ṣṣaṣlaŋ**?), var. \***zalaŋ** (?) “rust” [GT] (AS: Takacs 2004: 433) || CCh.: Masa \*zeŋ ~ \*seŋ “rust” [GT]: Gizey/Wina sēŋ, Masa sāŋ, Ham zēŋ “rouiller” (Masa: Ajello et al. 2001: 50) || Sem.: no certain cognates,<sup>55</sup> but cf. Ar. √znq > Maghrebi dialect tazannaq “s’érailleur (sac)”, mazannaq “érailleur, où il y a un défaut (tissu)”, (?) Maltese (i)zzenna? “rancir, perdre sa saveur” (Ar.: DRS 765, ZNQ2: isolated in Sem.).

<sup>51</sup> Ehret l.c.: ~ Qwadza cemaliko “straw” < SCu. \*<sup>n</sup>cōmari+ “straw” derived SCu. \*<sup>n</sup>cāw- (\*<sup>n</sup>ts-) “reeds” [Ehret] = \*caw- [GT]: Iraqw tsaw-o “reeds” [Ehret 1980: 201, #IV.F.1] by addition of -Vm- and -Vr- suffixes.

<sup>52</sup> For the semantical connection, cf., e.g., Eg. jb3 “to dance” vs. Sem.: Macro-Canaanite \*√ybl “to jubilate”.

<sup>53</sup> W. Leslau (l.c.) supposed that this verb is “perhaps causative” of Ennemor, Gyeto zəwāñä, Endegeny zəwāññä “to covet, crave meat” with a primary meaning \*,to make one covet sg., that is, \*,sg. that is beautiful, pretty, and, as a result it makes one covet it”. Alternatively, he was pondering whether “would it be borrowed from Cushitic” referring to LECu.: Kambatta danna “to be beautiful”, which would then be “coming to mean” a mediatory sense \*,to be pleased, like” as in the case of Amh. amarä “to be pretty”, used impersonally to mean “to be pleased, like”.

<sup>54</sup> The Twareg nominal stem was, however, treated by K.-G. Prasse (l.c.) as the source of an alleged denominative derivation in Ahaggar zung-ət “être très méchant, cruel” [Prasse], cf. EWlmd. zāŋ-āt “être très méchant envers” [PAM 2003: 895], which seem to represent a separate word.

<sup>55</sup> The striking match with Sem.: Syr., Mandaic zangārā “rouille” [Brk. 1928: 201] and Ar. zingār- “rouille, vert-degris” [BK I 1016] is illusory as these forms were eventually borrowed from Persian (Sem.: DRS 759, ZNGR1).

● **389. PGoemai \*-zaŋ** (compound with **\*man-**): Goemai man-zang “canine teeth in animals” [Sirlinger 1937: 135] = man-zàŋ “Augenzahn” [Jng. 1962b MS: 3] || SCu.: Alagwa conki “extreme tip or point” [Ehret 1980: 362, #V.B.6]<sup>56</sup> || Sem.: ES \*zāng-(ät) “long bâton pointu” [GT]: Tigre zāngät, Tna. zāngi, Amh. zāng, Gurage zāgäd (ES: DRS 757). To be separated from Goemai zun “elephant tusk” [Hellwig 2000 MS: 42]. Two ultimately related varieties (with C<sub>3</sub> \*h- and C1 \*ž-, resp.):

**389.1. Eg. znh.t** “Bohrer zum Ausbohren von Steingefässen” (OK, Wb III 461, 5).

**389.2. WCh.: Hausa žíngà** “to pierce (with dative)” [Abraham 1962: 429, 42].

● **390. AS \*zʷaŋ ~/> \*zUŋ** “to pound, thresh” [GT]: Mupun zún ~ pè-zún “threshing place” [Frj. 1991: 51, 70], Goemai zwang “to ram down (e.g. the soil), stamp down, press down (e.g. salt in a bag)” [Sirlinger 1937: 287] (AS: Takacs 2004: 428-429) | Ngizim zəmán “1. to forge, 2. flatten” [Schuh 1981: 180] || SBrb.: EWlmd. √zmm > zāmm-ät “donner un coup de pilon”, tã/tə-zamm-at, pl. ši-zamm-at-en “coup donné avec un pilon/objet lourd”, zəmməzəmm-ən “1. fait de piler ensemble, 2. fait de frapper ensemble plusieurs fois”, zəmmənzəmm-ət “donner des coups de pilon répétés” [PAM 1998: 375; 2003: 892] || (?) MEg. šəm (perhaps < OEg. \*žəm?) “zerstossen, zerstampfen” (MK, Wb IV 215): but cf. 390.2 below || Sem.: Ar. (Eastern dialects.) nzaḥam “être pressé, gêné”, (Marocco) zḥam “faire des efforts pour expulser (excréments, fœtus)”, (Spain) zahám (so: -h-) “presser l’un contre l’autre”, zihám (so: -h-) “presse (de foule), hâte” [DRS 716] < CAA \*√žhm “1. to push, press, 2. pound (perhaps pulverize by pressing down?)” [GT]. Eg.-Ar.: CED 173. AS-Sem.: Takács 2001: 83; 2011: 158.

**390.1.** Whether the isogloss of WCh.: Angas zong-gyer “the lower part of a type of barn that is divided into two stairs” (gyer “barn”) [Gochal 1994: 27]<sup>57</sup> and CCh.: Munjuk-Puss zoŋ (m) “grenier en vannerie” [Tourneux 1991: 129] | Lama zə̀nà “grenier fait d’une natte recouverte d’un toit et posé sur un socle en bois” [Sachnine 1982: 435], Zime-Dari sənà “grenier” [Cooper 1984: 23] also belongs here, has to be further researched.

**390.2.** Remote root variety with a voiceless *Anlaut*, viz. sg. like is attested by WCh.: AS \*sum < older \*sūm (?) “smithing” [GT]: Montol soom (so, -oo-) “blacksmith” [Ftp. 1911: 214], Goemai ge-suum “blacksmith” (ge- “person”?) [Ftp. 1911: 214] = sum “forging” [Sirlinger 1937: 227] = šum “smithing” [Kraft] = sum “smithing” [Hellwig 2000 MS: 31] (AS: Takacs 2004: 323) | Wangday tsuŋ “to pound (in mortar)” [IL/JI 1994 II 268] || MEg. šəm (or perhaps < OEg. \*žəm?) “1. zerstossen, zerstampfen, 2. (als medizinischer Fachausdruck) stauchen, quetschen usw.” (MK-, Wb IV 215) = “to pound, crush” (CED),<sup>58</sup> whence LEg. šəmj “pestle” (ostr. Cairo 25362:3 etc., CED, not in Wb) > Dem. šəm “pestle” (CED) > (S) **ca2mC** “Mörserkeule” (Wb) = “pestle” (CED 173) || Sem.: Ar. suḥum- (pl.) “marteaux de forgeron” [BK I 1063: isolated].

<sup>56</sup> Ehret l.c.: ~ Asa šogulo “thorn” < PRift \*č/č/cok- (č/č/ts’-!) “extreme tip or point”. Asa: stem plus -Vr-noun suffix, Asa apparently regularly changed \*r to /l/, #šVgu\_V: see Chapter 8, IV.

<sup>57</sup> Unless it derives from Angas \*zoŋ “deep(est level)” (Takacs 2004, q.v.).

<sup>58</sup> Regarding the semantical shift in Coptic (S) **caw2m** “to cause to fall, overwhelm, press down”, already J. Černý (CED 173) regarded it as “ultimately related” to Ar. zaḥama “to press”. Miscompared (assuming an alleged \*m extendative-fortative root complement) by Ch. Ehret (1995: 292, #552) with LEg. šhr “to strike”, ECu. \*çaḥ- “to hit” and some ECh. \*š- “to kill” < AA \*-çaḥ- “to beat”.

● **391. PGoemai \*z<sup>w</sup>aŋ** “to dart (fish)” [GT]:<sup>59</sup> Goemai zwaŋ “to poke about (in water, in grass) with a spear” [Sirlinger 1937: 287] = zwaŋ “to fish with spear” [Hellwig 2000 MS: 42] || perhaps Sem.: Syr. zənaq “lancer, (re)jeter” [DRS 765]?

● **392. AS \*ziŋ → \*zəŋ** (mostly prefixed \*kə- ~/> \*gə-) “nose” [GT] = \*kA-zAn (sic, \*-n) [Stolbova 1987]:<sup>60</sup> Gerka idung (so, -u-) [act. yidəŋ, -d- reg. < \*-z-]<sup>61</sup> “nose” [Ftp. 1911: 219] = yiddiŋ “Nase” [Jng. 1965: 174] = idəŋ “nose” [IL in JI 1994 II, 258], Angas guyong (so, -y-!) [-y- < \*-z-?] “nose” [Ormsby 1914: 313] = gəzəŋ (Kabwir dialect) “nose” [Jng. 1962a MS] = gəzəŋ “nose” [ALC 1978: 19] = pə-gùziŋ “nose” [Kraft] = gizing “nose” [Gochal 1994: app.] = guyong (so, -y-) [Stolbova < Ormsby], Sura pə-gəziŋ [Jng. 1963: 79] = giziŋ “nose” [Kraft], Mupun pəzəŋ (so, without prefix \*kə-!) [Frj. 1991: 51], Kofyar goəzoeng [gəzəŋ] “nose” [Netting 1967: 15], Mushere ngizing [act. ngəzəŋ?] “nose” [Diyakal 1997 MS: 157] = giziŋ “nose” [Jng. 1999 MS: 6], (?) Chip gəŋ “Nase” [Jng. 1965: 166], Montol kussung (so, -ss-) [Ftp. 1911: 219] = kəzəŋ [Jng. 1965: 171], Tal gúuzúuŋ [IL/JI], presumably Goemai \*goŋ [from \*goyəŋ < \*gozəŋ?] “nose” [GT] (AS: Stolbova 1987: 185, #364; JI 1994 II, 258; Takacs 2004: 427) | Kirfi útiŋi [Gowers] = wùttíŋi [Schuh] | Pa’a ʔatəŋ [Jng.] = atəŋ [IL] = àtín [MSkinner], Mburku tùŋhúú [Skn.], Diri ʔátíŋ [IL] = átín [Skn.] | Boghom nyuŋsi [Jng.] = nuŋsuŋ [IL] = nyongsong [Gowers] = nyúŋsuŋ [Shimizu] || CCh.: Gisiga (Dogba) hətaŋ vs. (Midjivin) hutuŋ [Jng.] || ECh. \*ʔ[e]tV(n)- “nose” [GT] > EDangla étíŋ, pl. étínáy “1. le nez, 2. pl.: les narines” [Dbr.-Mnt. 1973: 105], WDangla ètè (m) (so, without -n) “nez, narine”, but cf. ètintinààná ~ ètintinèèné “de façon nasillarde” [Fédry 1971: 28], Bidiya ʔètèena (f), pl. ʔeteŋ “nez” [AJ 1989: 75], Migama ʔítín (f), pl. ʔèttènná “nez” [JA 1992: 93] | Mubi-Toram \*ʔVTVn/ŋ “nose” [GT]: Mubi ídáánù (m), pl. áttán “Nase” [Lukas 1937: 182] = \*ídáánù “nose” [Doornbos-Bender] = ʔídáánō (m), pl. ʔáttán “nez” [Jng. 1990 MS: 24], Minjile \*ídanò “nose” [Doornbos-Bender], Kajakse \*atan “nose” [Doornbos-Bender] = ʔàtaan, pl. ʔátín “nez” [Alio 2004: 239, #34], Kujarke ka-ata [prefix ka-?] “nose” [Doornbos-Bender], Kofa ʔétéŋè (f), pl. ʔétéŋ “nose” [Jng. 1977 MS: 3, #6], Toram ʔeteŋ “nez” [Alio 2004: 255, #118], Masmaje ʔitaanò “nez” [Alio 2004: 282, #94], Jegu ʔètèntó, pl. ʔétéŋè “Nase” [Jng. 1961: 112], Birgit ʔétèŋ (m), pl. ʔétéŋà “nez” [Jng. 2004: 353] (Mubi: Doornbos-Bender 1983: 77, #59) || SCu. \*di/ung- “nose” [GT] = \*(i)ḍiŋ<sup>w</sup>a “nose” [Ehret]: WRift \*-dung- [GT]: Iraqw dunga, Burunge urunga, Alagwa urungi | ERift \*-ding- [GT]: Qwadza ningwato, Asa iringa | Ma’a núŋa [GT: < \*dungə] (SCu.: Ehret 1980: 192, #III.A.33).

**392.1.** Root variety in Sem. \*√zwm: Aram. of Talmud zīmā “narine, naseau”, Syr. zūmā “bec, museau” (Sem.: DRS 705; Dalman 1922: 127 and Jastrow 1950: 394): cf. Sem. √zrm.

<sup>59</sup> Earlier I was disposed to compare the Goemai root with SCu. \*√zng [GT]: Ma’a ki-zíngí-tí [-ti suffix] “lintel” [Ehret 1974 MS: 74] || Sem.: ES \*zāng-(ät) “long bâton pointu” [GT]: Tigre zängät, Tna. zāngi, Amh. zāng, Gurage zägäd (ES: DRS 757). AS-Sem.: Takács 2001: 83; 2011: 158.

<sup>60</sup> The supposed loss of AS \*-z- (via -y-?) in Angas [Ormsby], Chip [Jng.] and Goemai \*goŋ [GT] is still to be investigated. Should one assume an AS \*goŋ “nose” separately?

<sup>61</sup> Gerka -d- derives regularly from \*-z-. Thus, Gerka yiddiŋ “Nase” [Jng.] = idəŋ “nose” [IL] might be derived < \*yiziŋ (or sim.), which proves the etymon \*(yi)ziŋ without the prefix \*k/gə-.

● **393. AS \*-ziŋ ~ \*-zəŋ** (orig. *\*-səŋ*? always prefixed: *\*k/gə-zəŋ*) “urine” [GT]: Angas gūzn (so) “urine” [Foulkes 1915: 191] = ḡəzəŋ “Urin” [Jng. 1962a MS] = ngəzəŋ “urination” [ALC 1978: 43] = ngəzəŋ “urine” [Kraft] = ngizing “urine” [Gochal 1994: app.], Sura kəziŋ ~ kəzəŋ “Urin” [Jng. 1963: 70] = kəziŋ “urine” [Kraft] = kəziŋ ~ kəzəŋ “Urin” [Jng. 1963: 70], Mupun kəzəŋ “urine” [Frj. 1991: 31], Kofyar kəzəŋ [kəzəŋ] “urine” [Netting 1967: 20], Mushere ngizing [act. ngəzəŋ] “to urinate”, an po ngizing “I am urinating”, gizing ndaas “sperm” (lit. “male urine”, cf. ndaas “man”), cf. ngu ɖəŋ gizing ndaas dom loo sorop mop “person without sperm loves to see women” [Diyakal 1997 MS: 85, 157], Chip kəziŋ “urine” [Kraft], Goemai goesoeng [gəzəŋ] “urine” [Sirlinger 1937: 66] = kəsəŋ “urine” [Shimizu in JI l.c.] = gəsin (so -n) “urine” [Kraft] = gəseŋ (so, -ə/-e-) “urine”, ɖi gəseŋ “urinate” [Hellwig 2000 MS: 11] (AS: Takacs 2004: 425) || SCu. \*ʒung- [GT]: ERift: Qwadza dunga-yiko “urine” [Ehret 1980: 221, #V.D.17]<sup>62</sup> || Sem. \*ʒnḵ: Libyan Ar. zanaḡah “uriner, couler” [Frayha apud DRS 765: isolated in Sem.].

● **394. Sura zīŋ** “festgemacht, -gerichtet, fixiert (z.B. Augen auf etwas, auf etwas hin)” [Jng. 1963: 89] (Takacs 2004: 425: isolated in AS) || (?) Sem. \*ʒnḵ “to bind” [GT]: Akk. zanaḡu “to bind” [KB] || Syr. zanaḡa “clasp (agrafe)”, (denom.) znaq peal & pael “to bind (enchainer)” [KB, DRS] | Ar. zanaqa “to tie up” [KB] vs. zanaq-at- “rue étroite” [DRS] (Sem.: KB 276; DRS 764-765). AS-Sem.: Takács 2001: 80; 2011: 156.

● **395. PAngas \*zoŋ** “1. deep (e.g., pool), 2. deepest level” [GT]: Angas zong “a deep pool” [Foulkes 1915: 312] = nzəŋ (àm) “Teich” (so!) [Jng. 1962a MS: 46] = zoŋ “deep”, pi nzoŋ am “deepest part of a pool of water” (lit. “deep place of water”, cf. pi “place”, am “water”) [ALC 1978: 51, 70] = perhaps \*zong “lower part (?)” occurring in: zong-gyer “the lower part of a type of barn that is divided into two stairs” (gyer “barn”) [Gochal 1994: 27] (AS: Takacs 2004: 426) || Sem. \*ʒmH (or \*ʒHm) [GT]: Amharic žäma “fleuve, eau courante” [DRS 743] || SBrb.: Ayr ti-zəm-t, pl. tyə-zm-en, EWlmd. ši-zəm-t, pl. ši-zəm-en “1. réservoir artificiel pour l’eau, 2. abreuvoir” [PAM 1998: 375; 2003: 892]. AS-Sem.: Takács 2001: 80; 2011: 156.

● **396. AS \*zuŋ** (from *\*zum*? mostly prefixed) “1. chest”, hence *\*pV-zuŋ* “2. heart” [GT] = *\*zum-k* (so!)<sup>63</sup> “breast, heart” [Stolbova 1987]: Mupun zūuŋ (false long -uu-?) “chest” [Frj. 1991: 70], Kofyar fū-zūŋ [fu < \*pu] “chest” [Netting 1967: 13], Chip zuŋ “chest” vs. bə-zūŋ “heart” [Kraft], Montol po-zum-den (so, with -m) “heart” [Ftp. 1911: 217] = po-sum-

<sup>62</sup> Ehret l.c.: ~ WRift \*ruʔ-um “to suck breast” [KM]: Iraqw duʔum- “to suck breast”, duʔum-is- “to suckle”, Alagwa ruʔum- “to suck breast”, Burunge ruʔ- “to suck breast” (WRift: KM 2004: 242; SCu.: Ehret 1980: 221, #V.D.17) < SCu. \*ru/ūʔ- “to let leak, make ooze out (secretions only?)” [Ehret]. Ehret l.c.: This root must be reconstructed for proto-Southern Cushitic because the noun root of SCu. \*ru/ūʔu “sweat” > Qwd. dulu-tuko “sweat”, Ma’a mu-rúʔu “1. sweat, 2. heat” derived from it. Ehret assumed a narrowing of the sense of the Qwadza verb to a particular form of releasing bodily fluid, i.e., “to urinate”, took place before the coinage of the noun from the verb, with regular Kw’adza morphological deletion of /ʔ/.

<sup>63</sup> O.V. Stolbova (1987: l.c.) considers the final *\*-k* in her proto-AS reconstruction (derived from her WCh. *\*mbA-mAçîi ~ \*mbA-çîami* “breast, heart”) as an indicator of the nominal class of body parts.

den (so, mistakenly with s-!) [Stolbova < Ftp.], Goemai pe-zzung (so, zz-) “heart” [Ftp. 1911: 217] = boe-zung [bə-] “chest, breast, bosom” [Sirlinger 1937: 18] = pò-zùŋ “Brust” [Jng. 1962b MS: 5] = pà-zuŋ “chest” [Kraft] = bə-zuŋ “chest” [Hellwig 2000 MS: 1] = pe-zung (so, with pe- & z-!) [Stolbova < Ftp.] (AS: Stolbova 1987: 151, #68) | PRon \*žin/ŋ [\*ži- < \*ži-?] “breast, chest” [GT]: Bokkos ʔà-žin, pl. à-žyàn<sup>64</sup> (so: -n) “Brustkorb”, Daffo-Butura žiŋ, pl. žiŋáš “Brust(korb)”, Fyer čén, pl. čèèni “Brust(korb)” (Ron data: Jng. 1970: 84, 139, 216) < WCh. \*ži/uj (?) “chest” [GT]<sup>65</sup> || CCh.: PBata \*-zum- “chest” [GT] > Gude ʔəžúma [ʔə- < AA \*ḥa- body parts prefix?] “chest” [Kraft 1981 III 36, #50], Mwulyen nízúm-tígí (with suffix) “chest” [Kraft 1981 III 56, #50], Bachama ndùm-tò [-d- < \*-ž-?] “chest” [Kraft 1981 III 66, #50] || LECu.: PSomali \*ḥazam- (prefix \*ḥa- of anatomical terms) “Brust” [Lamberti 1986: 447, 198, 273].<sup>66</sup> There are a number of possible root varieties, cf.:

**396.1.** The same biliteral root was extended to triliteral, cf. CAA \*√**zmr** “(to be in) front” [GT] > Sem. \*√**zmr** [DRS]: Geez zammara “to begin, start” [Leslau 1987: 639] || (?) Eg.: no sure reflex<sup>67</sup> || SBrb.: (?) EWlmd. & Ayr e-zmār “garrot (partie du dos située en avant de la bosse dans/chez le chameau et où se place la selle), 2. avant-dos (du cheval et des autres grands quadrupèdes)” [Alojaly 1980: 214; PAM 2003: 893]<sup>68</sup> || Agaw “to begin” (borrowed from Amh. žämmär-): NAgaw: Hamta ḡamr- [CR], Kemant žämär- [Apl.], Qwara žämär- [Apl.] | SAgaw: Awngi žemer- [Apl.] (Agaw: Apl. 2006: 31) || SCu.: Ma’a zemera “in front” [Ehret 1980: 197, #IV.A.3].<sup>69</sup>

**396.2.** Another eventually related biliteral root variety with a voiced sibilant in the *Anlaut* may be seen in SAA \*√**sm** “breast” [GT] > SCu. \*sVm- “some front part of the body: perhaps breast” [GT]:<sup>70</sup> WRift \*ʔisaʔamu (sg.), pl. \*ʔisaʔami “nipple, teat” [KM] = \*-saʔam-

<sup>64</sup> Ron ʔa- < AA \*ḥa- body parts prefix (cf. Takacs 1997)?

<sup>65</sup> Earlier I was disposed to assume an irregular shift of WCh. \*ž- < AA \*š-. Cf. Eg. šnʕ “Brust, Oberkörper (des Menschen), Thorax” (CT-, Wb IV 506, 14; GHWb 828) = “breast” (FD 269; DCT 626), whose -nʕ could explain WCh. \*-ŋ, but the Central Chadic cognates listed here reveal instead an almost equally plausible procedure of WCh. \*-ŋ evolving from original \*-m#, which apparently excludes being a cognate to Eg. šnʕ which perhaps shows some affinity with SBrb.: ETawllemmet ta-səŋi-t, pl. ši-səŋay “liste frontale (point blanc ou tache blanche au front d’un animal)” [PAM 2003: 728, 731-732], although K.-G. Prasse (PAM 2003: 634) suggested that this is an s- prefix *nomen instr.* derivation from SBrb.: ETawllemmet əŋəy “2. commander, présider sur, régner, dominer”.

<sup>66</sup> Attested in various stems, with variations via metathesis \*ḥamaz- > \*ḥabaz-, see Lamberti 1986: 198, 273. The PSomali form should be better understood as \*\*ḥa-zam- [GT: \*ḥa- prefix of body parts] “Brust” [Lamberti 1986: 198, 270, 273, 447], whose reconstruction is uncertain as all reflexes are supposed to have undergone a metathesis \*ḥamaz- > \*ḥabaz-.

<sup>67</sup> Not to be confused with LEg. zm3 (written with the misleading zm3 hieroglyph) “crown of the head (and sm3j seems to be anything, especially the head, with hair growing on it)” (PL 841), which was in the PT originally sm3.

<sup>68</sup> Its etymological position is vague. Cf. alternatively (?) PAngas \*zim (?) → \*zəm via \*züm “1. back, 2. shoulder” [GT] below (entry no. 364.4.).

<sup>69</sup> Ch. Ehret (l.c.) segmented in the Ma’a form a suffix -Vm-, plus later -Vr- suffix attached to an alleged stem \*z-, which he compared with Iraqw cewa (ts-) “early”, also ceʔa (ts-) “space (area outside)”, ceʔay “outside”.

<sup>70</sup> Interestingly, Ch. Ehret (1980: 183, #40) assumed a SCu. \*sūm- “nipple, teat” on the basis of fully different comparanda, viz. Iraqw suma “shoulder” (GT: semantically vague) and Ma’a ki-sú [-Ø < \*-m# possible] “udder”, which are certainly unrelated, whereas at the same time, on the same page, Ehret (1980: 183, #41) forced the very much possible Dahalo cognate under SCu. \*sumba “peak, top (esp. of head)”.

“breast” [GT] > Iraqw ʔisēmo (sg.), pl. ʔisēmaʔ “nipple, teat” [KM] = isēma (pl.: “breasts”) [Fleming], Gorowa ʔisāmó (sg.), pl. ʔisāmaʔ “nipple, teat” [KM], Alagwa ʔisaʔamu (sg.), pl. ʔisaʔamēri “breast, nipple” [KM] (WRift: KM 2004: 166) | Ma’a ma-sému “breasts” [Fleming] | Dahalo sùma “1. forehead, 2. in front” [Ehret] = suma “face, forehead” [EEN 1989: 25] (SCu.: Fleming 1969: 24) || CCh.: Bata-Garwa man-šumé (GT: compound?) vs. Bata ma:sùmčé (-ā-, -tsch-) “Brust” [Strümpell], Bata-Demsa šumšé “Brust” [Strümpell] | Gidar ssimiá “Brust” [Strümpell] (CCh.: Strümpell 1910: 452; 1922-3: 115, quoted also in JI 1994 II 46-47). Areal parallel: PKhoe \*sam (f) “breast” [Voßen 1997: 438].

**396.3. Egypto-Chadic (hardly PAA) \*√Smb < \*√Snb (?)** “breast” [GT], solely reconstructible on the basis of the isolated isogloss of CCh.: Gude acembá (-ts-) [ʔa- < AA \*ḥa-body parts prefix?] “Brust” [Strümpell] || Eg. šnb.t “1. (MK-) Brust des Menschen, 2. (LP) Kehle” (MK-, Wb IV 512-3), may retain the same (???) biliteral root whose final -b was originally an additional C<sub>3</sub> root extension. But whether precisely the same root hides in both distant languages, is highly dubious. Gude -c- (-ts-) was hardly a reflex of a lateral sibilant like š- in Egyptian. Henceforth, at the moment, one can only assume that Eg. šnb.t was perhaps only remotely akin to the Gude.<sup>71</sup>

● **397. PAngas \*zuŋ > \*zəŋ** “authority” [GT]: Angas zung-zung “authority” [Foulkes 1915: 313] = zəŋ-zəŋ (Kabwir dialect) “authority” [Jng. 1962a MS: 45] (isolated in AS: Takacs 2004: 428) || Sem. \*√zʕm: OSA (Sabaic) zʕm “declaration” [SD 170], Ar. zaʕam-at- “dignité, pouvoir”, zaʕīm- “garant, chef, prince” [DRS 770] | MSA: Jibbali √zʕm > əzteʕīm “to take a decision as the most important person in the family, be the head of the family”, zʕīm, pl. zaʕyēh “the most important person in, head of the family” [Johnstone 1981: 314], Mehri zəʕīm “head of the family” [Johnstone 1987: 463]. AS-Sem.: Takács 2001: 82; 2011: 157.

● **398. PAngas \*zuŋ > \*zəŋ** “punishment” [GT]: Angas zung-zung “punishment” [Foulkes 1915: 313] = zəŋ-zəŋ (Kabwir dialect) “punishment” [Jng. 1962a MS: 45]<sup>72</sup> (isolated in AS: Takacs 2004: 428) || Sem. \*√zmy [DRS]: Syr. zymyʔ ~ zʔmyʔ “peine, amende”, JPSyr. ʔezdamī “être puni” (Sem.: DRS 747) || SCu.: Ma’a -zàrà < \*zamay- (?) “to punish” [Ehret 1974 MS: 74] < PAA \*√zmy “to punish” [GT]. AS-Sem.: Takács 2001: 82; 2011: 157. For another case of AS \*-ŋ < AA \*n + \*y see entry no. 383 above.

● **399. PGoemai \*zuŋ-** [GT]: Gmy. zung-pai “the brewing of a small quantity of beer” (-pai obscure) [Sirlinger 1937: 285] || Eth.-Sem. \*√zngd: Tigre zəngada, Tna. zängäda,

<sup>71</sup> Whether ES \*sanbuʔʕ “lung” [GT] || ECh.: WDangla tyàmbiìnà [regular < \*čamb-] (pl.) “poumons” [Fédry 1971: 221] can be conceived as a valid isogloss \*čVmb- (or \*c-?), is an open question, which can only be decided in the light of further reflexes. Eg. šnb.t has been affiliated with the Ethio-Semitic (Ethiopian) term (OS 1992a: 171; Blažek 1994 MS Bed., 34-35), but the latter’s etymology is very much disputed (see Takacs 2016: 299-301). In any case, even if the cognacy of the striking ES-WDangla match turns out to be right, it is presumably not related with SAA \*√sm “breast” [GT] at all.

<sup>72</sup> In the light of the etymological data presented in this and the preceding entry, this 2<sup>nd</sup> meaning of Angas zuŋ-zuŋ may represent a distinct etymon, contrary to H. Jungrathmayr’s assumption (i.e., “authority” exercised on somebody?).

Amh. zāngada “sorte de céréale qui entre dans la préparation de la bière” (ES: DRS 758, ZNGD1).

● **400. AS \*zar > \*zər vs. Goemai var. \*šar “star”** [GT] = \*zar < \*-sar [Stolbova 1977 & 1987]: Gerka dar-kir [d- seems regular < \*z-] “star” [Ftp. 1911: 220], Angas zaar “star” [Stolbova < ?, not in Foulkes 1915], Sura zār “Stern” [Jng. 1963: 89] = sār (so, s-!) “star” [Kraft], Mupun zār “star” [Frj. 1991: 69], Mushere kop-zar “comet” (act. “spear-star”, cf. kop “spear”), puus zar “evening time when the sun is about to set, around 5 PM to 6 PM” [Diyakal 1997 MS: 250, 283], Chip zər “star” [Kraft], Montol zai [-i < \*-r reg.] “star” [Ftp. 1911: 220] = zayí “Stern” [Jng. 1965: 172], Goemai sum-šar “star” [Ftp. 1911: 220] = soem-šaar “star”, sar-ḫit “the morning star” (ḫit “morning”) [Sirlinger 1937: 199, 225] = šum-šār “star” [Kraft] = sem-šaar “star” [Hellwig 2000: 32] (AS: Stolbova 1972: 182; 1977: 158, #254; 1987: 201, #519; Takacs 2004: 423) | Daffo-Butura ṽžórèt, Kulere sísírì, (???) Fyer wádèr [wa- and -ḍ- not clear] “star” (Ron: Jng. 1970: 390) | SBAuchi \*ĉ/šŪr “star” [GT]: Sayanchi čar [Kraft 1981: #119], Mbaaru saarù, Zaranda tyaa-ĉ/šer (-tl-), Tule tyaa-ĉ/šŭr (-tl-), Zakshi čààž/žur (-dl-), Boot ĉ/šàar, Zaar čàar (SBAuchi: Shimizu 1978: 31, #46) || CCh.:<sup>73</sup> Pidlimdi šir-àndì “star” [Kraft 1981: #119] || NOM.: (?) Zayse zír-o “dawn” [Ehret] | Malé zə’rìtsi [Siebert] = zəlènsi [Lewis apud Fleming] “lightning, thunder” (Male: Bender 2003: 328, #55) || NBrb.: Qabyle i-zrìr “être clair, dégagé (ciel)” [Dallet 1982: 954] || Sem.: Ar. zarra “briller” [DRS 805, ZRR3: isolated] = zarra “briller” [DRS 805, ZRR3: isolated].

**400.1.** The same root was triradicalized also by an epenthetic extension \*-h-, cf. Sem. \*√zhr [GT]:<sup>74</sup> Hbr. √zhr “glänzen, Glanz verbreiten”, Syr. √zhr “glänzen” || Ar. √zhr “1. glänzen, 2. blühen” (Sem.: GB 194). For WCh.-Sem. see Blazek 1992: 27, fn. 23.<sup>75</sup> Sem.-Zayse: Ehret 2000 MS: 106, #1495.

\*

<sup>73</sup> To be distinguished from CCh.: Banana čŭw-ra, Banana (Museye) čiw-čiw-ra (Masa: Kraft 1981: #119), which derive from common Masa \*čiw “star” [GT]: Gizey/Wina čiw, Masa čiw, Ham čiw, Musey čiwčiw, Lew číčiw, Marba číčiw “étoile” [Ajello et al. 2001: 24], Zime-Dari čičiw “étoile” [Cooper 1984: 4].

<sup>74</sup> Derived by Ch. Ehret (2000 MS: 101, #1473) as a nominal root \*√zhr “noon” (assuming an alleged noun suffix extension \*r) from his alleged biradical Sem. \*√zh “to shine” in comparison with LECu.: Afar dahan- “to suffer from heat” (Ehret: root extension \*n “non-finitive”) and WCh.: Ngizim ḍaafáu “heat (of environment), sweat” (Ehret: extension \*f “iterative” and \*w “deverbative”) < AA \*-zah- “to be hot, burn (intr.)”. Strangely, in the same work, Ehret (op. cit., p. 106, #1495) omitted Sem. \*√zhr among the reflexes of Sem. biliteral \*√zr “to be bright, glossy, yellow” < AA \*-zir- “to shine, burn (intr.)”.

<sup>75</sup> V. Blazek (l.c.) included in this comparison also EBrb.: Nefusa žiri, Siwa ta-ziri, Ghadames ta-ziri “moon” || NBrb.: Wargla ta-ziri “moon”, Beni Snus ta-ziri “moon-light” etc. in a long-range comparison with Basque izarr “star” and NCAuc. \*žwHarʿi “star”. But the Berber *comparanda* are certainly misplaced here, cf. their usual (and correct) equation with Sem. \*šahar- “moon”, which was, in turn, equated by O.V. Stolbova (1987: 201, #519; HSED 124, #531) with WCh. \*čaHar- “star” (based upon some AS and SBAuchi reflexes). Eventually, of course, the respective PAA roots behind both Sem. \*√zhr and \*√shr might be considered as rhyme-root varieties (cf. the supposal already in GB 780).

## Abbreviations of languages and other terms

(A): Ahmimic, AA: Afro-Asiatic (Afrasian, formerly: Semito-Hamitic), Akk.: Akkadian, Amh.: Amhara, Ar.: Arabic, Aram.: Aramaic, AS: Angas-Sura, Ass.: Assyrian, (B) Bohairic, Bab.: Babylonian, BAram.: Biblical Aramaic, Bed.: Bed'awye (Beja), BM: Bura-Margi, BN: Bade-Ngizim, Brb.: Berber (Libyo-Guanche), BT: Bole-Tangale, CCh.: Central, Ch.: Chadic, Cpt.: Coptic, CT: Coffin Texts, Cu.: Cushitic, DB: Daffo-Butura, Dem.: Demotic, E: East, Eg.: Egyptian, ES: Ethio-Semitic, ESA: Epigraphic South Arabian, Eth.: Ethiopian, Eth.-Sem.: Ethio-Semitic, (F): Fayyumic, GR: Ptolemaic and Roman period, H: Highland (in Cushitic), Hbr.: Hebrew, Hgr.: Ahaggar, IE: Indo-European, irreg.: irregular, JAram.: Jewish or Judeo-Aramaic, KK: Kera-Kwang group, L: Late, L: Low(land), lit.: literature, LP: Late Period, M: Middle, Mag.: magical texts, Math.: mathematical papyri, Med.: medical texts, MG: Mofu-Gudur, MK: Middle Kingdom, MM: Mafa-Mada group, MSA: Modern South Arabian, N: New, N: North, NE (or NEg.): New Egyptian, NK: New Kingdom, NS: Nilo-Saharan, O: Old, OK: Old Kingdom, Om.: Omotic, OSA: Old South Arabian, OT: Old Testament, P: Proto-, PB: Post-Biblical, PT: Pyramid Texts, reg.: regular, S: South, (S): Sahidic, Sab.: Sabaeen, Sem.: Semitic, Syr.: Syriac, TA(ram): Aramaic of Talmud, Ug.: Ugaritic, W: West, (E)Wlmd.: (East) Tawllemmet, Y: Young(er).

## Abbreviations of author names

Abr.: Abraham, AJ: Alio & Jungrathmayr, Alm.: Alemayehu, Apl.: Appleyard, BK: Bieberstein Kazimirsky, Brk.: Brockelmann, CR: Conti Rossini, Ctc.: Caïtucoli, Dbr.: Djibrine, Dlg.: Dolgopol'skij, EEN: Ehret & Elderkin & Nurse, Egc.: Eguchi, Ehr.: Ehret, Eld.: Elderkin, Fcd.: Foucauld, Fdr.: Fédry, FH: Farah & Heck, Flk.: Foulkes, Flm.: Fleming, Frj.: Frajzyngier, Frz.: Fronzaroli, Ftp.: Fitzpatrick, GB: Gesenius & Buhl, Gcl.: Gochal, Grb.: Greenberg, Grd.: Gardiner, GT: Takács, Hds.: Hudson, Hfm.: Hoffmann, Hlw.: Hellwig, Hsk.: Hoskison, Hyw.: Hayward, Ibr.: Ibrizimow, IL: Institute of Linguistics, IS: Illič-Svityč, JA: Jungrathmayr & Adams, JI: Jungrathmayr & Ibrizimow, Jng.: Jungrathmayr, Jns.: Johnstone, JS: Jungrathmayr & Shimizu, KB: Koehler & Baumgartner, KM: Kießling & Mous, LS: Lamberti & Sottile, Mkr.: Mukarovsky, Mnt.: Montgolfier, Mts.: Matsushita, Nct.: Nachtigal, NM: Newman & Ma, OS: Orel & Stolbova, PAM: Prasse, Alojaly, Mohamed, PH: Parker & Hayward, RB: Rapp & Benzig, Spg.: Spiegelberg, TG: Takács.

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## Mubi-Toram lexicon and Afro-Asiatic III: Lexemes with initial \*b-<sup>1</sup>

Gábor Takács

Department of Classical Philology, University of Łódź (UŁ)

Lexicographical Library of Afro-Asiatic Root Research at Balatonederics (LLAARR)

Member of the Associazione Internazionale di Studi sul Mediterraneo e l'Oriente, Roma (ISMEO)

e-mail: gaktak@datatrans.hu | ORCID: 0000-0002-2466-6451

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The paper is another part of a planned longer series designed to step by step reveal the Chadic and wider Afro-Asiatic cognate heritage in the lexical stock of the Mubi-Toram languages which represent the easternmost (27th) group of the vast (6th) Chadic branch of the gigantic Afro-Asiatic family.

**Keywords:** Afro-Asiatic (Semitic-Hamitic) comparative linguistics, Chadic, etymology.

### Introduction

Mubi-Toram is a group of languages in the Republic of Chad (some of them pretty close to the border with Sudan<sup>2</sup> suggesting to be regarded as remnants of the last proto-Chadic

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<sup>2</sup> Like, e.g., the Kajakse and Kujark/ge, the easternmost forerunners (?) of the Chadic family examined by P. Doornbos and M.L. Bender (1983: 59-60), who localized Kajakse in "Wadai, between 12 and 13°N and between 20°30' and 21°30'E. ... The Kajakse are concentrated around Jebel Kajakse and five similar hills in the neighborhood". The Kajakse are known to them "also as refugees in the border zone on Sudanese territory." They described the Kujarge as inhabiting "seven villages in Chad near Jebel Mirra (11°45'N – 22°15'E); also scattered among Fur and Sinyar in Sudanese villages along the lower Wadis Salih and Azum." Both authors are disposed to identify the latter people with the Birgit in the same group: "As Chadic speakers, their name might point to their being Chadian Birgid, because Fur and Daju neighbors of the Sudanese Birgid call them Kajjar, and both Chadian and Sudanese Birgid have the same self-name of Murji. Informants disagree whether their origin lies in Darfur or in their present habitat. The Kujargé are bounded to the west by the Daju-Galfigé; to the north by the Sinyar; to the east and south

invaders from the eastern direction).<sup>3</sup> This group belongs to the eastern subbranch of Chadic and thus represents the member of the immense Afro-Asiatic (Semito-Hamitic) macrofamily comprising six equipotential branches: Semitic, Egyptian, Berber, Cushitic, Omotic, and Chadic. Mubi-Toram is namely the last (26<sup>th</sup>) Chadic group in the classification proposed by H. Jungraithmayr (JI 1994 II xv). This is one of the least studied Chadic groups from the standpoint of both lexicography and comparison. For each of its daughter languages we usually find just one wordlist, among them only Mubi is relatively better provided with sources.<sup>4</sup>

The success of modern research on Chadic phonological and lexical reconstruction (initiated by V.M. Illič-Svityč and P. Newman in the mid-sixties of the 20<sup>th</sup> century) fundamentally depends on how the internal (Chadic) reconstruction and external (Afro-Asiatic) comparison of every single individual Chadic language group proceeds at the same time. Unfortunately, out of the 26 Chadic groups, only six (namely, Angas-Sura, Bole-Tangale, North Bauchi, Bura-Margi, Mafa-Mada, Kotoko) have been so far more or less satisfactorily studied from this viewpoint.<sup>5</sup>

The work on the projected comparative lexicon of the Mubi-Toram languages has been begun by the author in summer 2008.<sup>6</sup> The present series of papers<sup>7</sup> is to integrate this remote lexical stock in its wider Chadic and Afro-Asiatic context by providing materials for the research outlined above.

by the Fur-Dalinga, Fongoro, Formono, and Runga. ... This population may very well have been slaves of the Daju Sultans of Der Sila, removed from the western boundary by force or conquest, to protect or populate the eastern boundary of the sultanate.”

<sup>3</sup> For the hypothesis of a long wandering of Chadic ancestors through the Wadi Howar due to disappearing green Sahara in the Holocene see most recently Jng. 2020, esp. 15-18 and 34-44.

<sup>4</sup> Birgit: Jng. 1973 MS and 2004; Jegu: Jng. 1961; Kofa-Mogum: Jng. 1977 MS; Masmaje: Alio 2004; Kajakse: Doornbos & Bender 1983, Alio 2004; Kujarke: Doornbos & Bender 1983; Masmaje: Alio 2004; Minjile: Doornbos & Bender 1983; Mubi: Lukas 1937; Jng. 1990 MS, Doornbos & Bender 1983; Toram: Alio 1988 MS and 2004.

<sup>5</sup> Although my research on the lexical reconstruction of the individual Chadic groups dates back before the turn of the millennium (thus, e.g., Angas-Sura since 1998, Dangla-Migama and Mubi-Toram since 2008), my work in this domain has only become accelerated and more extensive since the spring of 2019, when a whole set of further Chadic groups (North Bauchi, Musgu, Masa) as well as Southern Cushitic and Omotic were subject to a simultaneous comprehensive lexical reconstruction. This research has been manifested since 2021 in the new project of micro-reconstructions in the Southern Afro-Asiatic lexical root stock with the support by the grant “Advanced Research in Residence” (ARR) of the University of Łódź, which I gratefully acknowledge in this place.

<sup>6</sup> The author expresses his gratitude to the Alexander von Humboldt-Stiftung (Bonn, Germany) for permanently supporting his research in 1999-2000, 2002, 2005, 2008, 2020 at the Institut für Afrikanische Sprachwissenschaften of the J.W. Goethe University (Frankfurt a/M), where the materials a.o. for the present paper were mostly collected. My cordial thanks go also to Prof. Khalil Alio (University of N'Djaména, Chad Republic) for submitting his field research records at my disposal in 2002.

<sup>7</sup> Its first part with roots having a \*b- in the *Anlaut* was published in *Acta Orientalia Acad. Scient. Hung.* (Budapest) 62/3 (2009), 315-336. The second part of this series with addenda to Mubi-Toram \*b- is forthcoming in *Lingua Posnaniensis* (Poznań) 63/2 (2021).

### Mubi-Toram lexemes with \*ḥ - + dentals

**151. Mubi būdíḡē** (m), pl. **bóddúk** “coquillage” [Jng. 1990 MS: 7] may derive via the metathesis of glottalization from a root like \*ḥbḍK (< AA \*ḥbḍ/ḥ/ḥ/ḥK) which appears at the moment to be isolated with this meaning and so, for the time being, one is better disposed to suppose here an innovation, cf. perhaps Sem. \*ḥbḍ > MSA: Sqt. bḍq, Mehri baḍáúq “(se) déchirer” (MSA: DRS 78, bḍq) ||| ES: Amh. bāṭṭāqā “trancher”, bāḥḥāqā “déchirer avec les mains, les dents, etc.” [DRS 60, bḥq1: isolated in Sem.], which represent members of a widespread family of PAA root varieties (dealt with in detail in EDE II 614-616), cf. SAA \*ḥptk ~ \*ḥptḡ “to split open” [GT], PAA \*ḥftk ~ \*ḥfdk “to tear apart” [GT], PAA \*ḥptk ~ \*ḥptḡ “to separate, open” [GT].

**152. Kajakse ḥtār** “varan” [Alio 2004: 240, #55] seems to have been extended by the C<sub>3</sub> root suffix (nominal class marker of certain animals assumed by I.M. Diakonoff) and so it may well belong to a biconsonantal AA root signifying some sort of lizard, cf. SAA \*ḥt- “lizard sp. (?)” [GT] > NOM.: Dime betá “lizard” [Fleming in Bender 2003: 213, #82: isolated] ||| HECu.: Burji bītṭ-ē (f) “lizard”, cf. also būḥ-i (m) “lizard” [Sasse 1982: 36, 41, resp.: isolated in ECu.]<sup>8</sup> = bītṭ-e/ē (f) vs. buḥ-i (m) “lizard” [Hudson 1989: 93] ||| WCh.: (???) Angas ḥt (so, with -t) [regular metathesis < \*ḥt?] “otterähnliches Wassertier, dessen Bisse gefürchtet wird” [Jng. 1962 MS].<sup>9</sup> See Takacs 2022: 129, #95 (not discussed in EAAN I).

**152.1.** In, for semantical considerations, it is difficult to be tempted by the homophony of Ch. \*ḥbḍr “worm” [GT] > CCh.: Mada bēḍḍēl “ténia, ver solitaire” [Brt.-Brunet 2000: 67] || ECh.: Mokilko ḥtérē (f) “Würmer (Eingeweide)” [Lukas 1977: 224].

**152.2.** This is the case also with Chadic (or PAA???) \*ḥbtr “1. worm, 2. snake” [GT] > Sem.: (?) Akk. mubattiru (jB) “ein Wurm (?)” [AHW 665]<sup>10</sup> ||| Eg.: uncertain traces of an hypothetic and vague old \*bt3.w (< \*btr???) “worm” (GT)<sup>11</sup> ||| CCh.: Daba mburutu “ver de Guinée, draconculose” [Mouchet 1966: 137] | Mafa-Mada \*bUtUr- “horned viper (?)” [GT]: Gisiga botoro “Art Brillenschlange” [Lukas 1970: 118], Mofu-Gudur batara ~ botoro “vipère cornue” [Brt. 1988: 85] = bātārā “serpent sp.” [Brt. 1978: 50], Mofu-Mokong bōtōrō “serpent sp.” [Brt. 1978: 50] | Zime-Dari būdōr “serpent sp.” [Cooper 1984: 2], Lame būdōr “snake

<sup>8</sup> H.-J. Sasse (l.c.) was disposed to combine these words with the Oromo reflex of LECu. \*būt- “puff-adder” [Black 1974: 187], although its Burji reflex is būt-ē. W. Leslau (1988: 184), in turn, compared the Burji term with HECu.: Sidamo bītṭ-e “kind of small bird”.

<sup>9</sup> Apparently an isolated record not even found in other Angas lexicons. A misrecorded *Auslaut* of Angas biip “big water animal with short tail (bites severely): otter (?)” [Foulkes 1915] < AS \*ḥip “a small mouse-like animal” [GT 2004]?

<sup>10</sup> Explained in the AHW 144 as a derivative of butturu “verstümmeln”.

<sup>11</sup> Cf. the snake det. in Eg. bt3.w (var. of bt.w) “Bez einer unheilbaren Krankheit” (Med., Lit. MK, Wb I 485, 13).

sp.” [Sachnine 1982: 288]<sup>12</sup> || ECh.: WDangla bōttòr (m.sg.coll.) “petit ver parasite du mil (sur épis)” [Fédry 1971: 91].

### Mubi-Toram lexemes with \*ḡ- + sibilants

**153. Birgit ḡaaṣí (ḡaaṣá, ḡaaṣò)** “foquer” [Jng. 2004: 351] | Bidiya ḡaaṣ (ḡaaṣí, ḡaaṣèṅ), pl. ḡaṣàw (ḡaṣàawí, ḡaṣàawèṅ) “demander en mariage, choisir une épouse” [AJ 1989: 61]: their common \*ḡaṣ- may presumably derive from a common ECh. \*baḡy- “to make efforts for/in the marriage (?)” [GT] || SBrb.: Ahaggar beḡbeḡ “copulation (entre 2 personnes de sexes différents)” [Foucauld 1951-2: 118; DRB 154, bḡ4: isolated in Brb.].<sup>13</sup> One is disposed to eventually affiliate hereto further AA roots:

**153.1. PAA \*ḡbḡ** “1. to press (out?), 2. eject fluid (by pressing?)” [GT] > Sem.: Syrian Ar. baḡḡ “1. faire jaillir en pressant, lancer, rendre par jets, 2. procréer des enfants en grand nombre” [DRS], cf. also Classical Ar. baḡḡa (baḡḡa) “faire des efforts, travailler avec zèle et assiduité à qqch.” [BK I 139] (Ar.: DRS 61) vs. Ar. ḡbwḡ I “1. injecter, lancer le sperme dans l’utérus” [BK I 178] = “éjaculer, copuler” [DAFA 917b] = “éjaculer” [DRS 51: isolated in Sem.] || NBrb.: Shilh biḡḡi “jaillir” [DRB] (NBrb.: DRB 155, bḡ7: isolated in Brb.?) || CCh. \*ḡVc- < \*\*bVḡ- “to press, squeeze” [CLD]:<sup>14</sup> Higi-Bana ḡósá “presser, extraire beaucoup de liquide” [CLD < ?] | Paduko ḡiḡa “serrer” | Lamang ḡica “to press (through sieve)” [Wolff], cf. also Lamang əbica (sic: -b-) “to squeeze” [Hamm], Vemgo ḡicu “to squeeze” [Hamm] (CCh.: CLD VI 75, #153a).

**153.2. PAA \*ḡbḡ** “1. seed, semen (???)” [GT] > presumably Sem. \*ḡbyḡ: Ar. bayḡ- “sperme” [DRB 155, byḡ: isolated in Sem.?] || ECU. \*bVḡ(aḡ)- (\*-ḡ- obscure) “seed” [GT]: Arbore báḡ-o (f) “seed prepared for sowing” [Hayward 1984: 345] | Gawwada poḡaḡḡo “Saat” [AMS 1980: 264] || NOM.: Zergulla biḡe-tta “seed” [Siebert-Hoeft in Bender 2003: 93, #114a] || (???) SOm. \*ḡēt-a “seed” [GT]:<sup>16</sup> Ari ḡēta [Tsuge 1996: 169, #184], Banna ḡeta

<sup>12</sup> Note that N. Skinner (1996: 21) equated Lame budor mistakenly with Sem. \*baḡm- (for details see Eg. btn.w above) and LECu. \*būt-.

<sup>13</sup> Affiliated by K. Naït-Zerrad (DRB l.c.) with NBrb.: Mzg. bbeḡ “plonger, immerger, (s’)enfoncer” [Taïfi in DRB] | Mzab ə-bbəḡ “1. tremper, plonger dans un liquide ou ailleurs, 2. coïter” [Delheure 1984: 17], Wargla bbeḡ “tromper, plonger, piquer, enfoncer une pointe, un objet quelconque par un bout dans un liquide” [Delheure in DRB] | Qabyle e-bbeḡ “plonger, enfoncer” [Dallet 1982: 61] (NBrb.: DRB 154-155).

<sup>14</sup> Based by O.V. Stolbova (CLD VI 75, #153a) on a semantically unreliable comparison with CCh.: Zulgo (Zelgwa) buḡ “masser, pétrir avec la main” [Haller et al.], Mafa mbác- “piétiner” [Br.], Muyaḡ ámbàc “to crush an object” [Smith]. She even took note of Lamang əbica [Hamm] vs. Lamang ḡica [Wolff] and Zulgo bac, ḡac “tuer; briser, casser”, although she too admitted that a “secondary emphatization (bVc- > ḡVc-) is not regular”, but “in a number of languages two emphatics are not compatible in one word”. Her comparison of all these diverse CCh. parallels with Sem.: Ar. ḡbḡw I “presser (son débiteur en réclamant de lui son dû)”, II “rendre eunuque” [BK I 133] is either semantically or/and phonologically vague.

<sup>15</sup> Of course, the DRS (l.c.) attempts at rendering this isolated form as a variation of Sem. \*ḡbyḡ “white”.

<sup>16</sup> Provided it displays the same glottalization metathesis (i.e., \*ḡēt-a < \*\*bēt-a < \*\*bēḡ-a???) that has so far been only known in Chadic. Otherwise, one is disposed to affiliate it with Om. \*ḡbd “(to sow) seed” [GT]. Cf. Takacs 2022: 128, #85.

[Masuda apud Tsuge 1996: 186, #184], Hamer beta [Fleming] = beta [Tsuge 1996: 169, #184], Karo peta [Fleming], all reflexes signifying “seed” (Aroid: Bender 1994a: 157; 2003: 216: #114).

**153.3. PAA** \* $\sqrt{b\check{c}}$  “2. offspring, child” [GT] > NBrb. \* $\sqrt{bz}$ : Wargla ta-bza “marmaille, enfants, jeunesse”, Figuig a-bziz “garçon”, Snus l-bezz “marmaille”, a-bzez “petit enfant” | Tamazight bezz (var. de bezz) “enfanter” (NBrb.: DRB 155, bz11: var. to \* $\sqrt{bz}$ ?) || LECu.: Saho and Afar bād-ā, fem. -ā “Kind: 1. Sohn, Tochter, Knabe, Mädchen, 2. bei Tieren das Junge” [Reinisch 1886: 829-830; 1890: 83-84]<sup>17</sup> = Saho barha “son”, barhä “daughter” [Vergari 2003: 53] = Afar bād-ā “figlio”, fem. bād-ā “figlia” [Colizza 1887: 112] || NOm.: PYemsa \*buḍ- (???) [GT] > Yemsa bur(?)ussi (nur als Plural belegt) in: burus-ni kit/yó “Kinder, Buben”, burussí-sà kit/yó “die Kinder, Buben” [Lamberti 1993b: 333: isolated in Om.].

**153.4. PAA** \* $\sqrt{b\check{c}}$  “genitalia” [GT] > Sem.: NSyr. (?) būṭā [-ṭ- regular < Sem. \* $\sqrt{t}$ - < AA \* $\sqrt{c}$ -] “pénis” [DRS 51-52: dubious Sem. etymology]<sup>18</sup> || NBrb.: Shilh a-bazza “verge (membre viril)” [DRB 155, bz7: isolated in Brb.?]<sup>19</sup> || LECu.: Afar buḍḍ-e (f) “penis” [PH 1985: 139]<sup>20</sup> = Saho-Afar buddhe “Penis” [Lamberti: -ddh- < \* $\sqrt{d}$ -] | Oromo bitto? “penis” [Lamberti]<sup>21</sup> > SOromo dialects biṭi “penis” [Stroemer 1987: 274] || NOm.: PYemsa \*buḍ- (???) [GT] > Yemsa bur?ā [GT: -r?- < \* $\sqrt{d}$ - may be regular] “Penis” [Lamberti 1993b: 333: isolated] (Yemsa-LECu.: Lamberti 1993b: 333).<sup>22</sup>

**153.5.** Presumably the same biradical core root survives with a nasal and a C<sub>3</sub> \*-r root extension (?) in Sem. \* $\sqrt{b\check{t}r}$  [DRS] > \*bi(n)ṭur- “clitoris, vagina” [SED]:<sup>23</sup> Akk. (OBab., Standard Bab.) biṣ(ṣū)r-u “weibliche Scham” [Holma] = biṣṣūr-u “female genitals” [CAD b 268] = biṣṣūr-u “weib. Scham, vulva” [AHW 131a] = “vulve” [DRS] || Ar. baẓr- ~ baẓar- ~ bayẓar-

<sup>17</sup> Of course, neither of the comparisons (Somali wil or Macro-Canaanite \* $\sqrt{bn}$ , \* $\sqrt{br}$  “son”) offered by L. Reinisch (1886: 829) is phonologically convincing.

<sup>18</sup> Cf. Sem. \*bawṣ-ṭ- “bottom” [GT]: Mandaic buṭa “bottom, anus (still used)” [Drower-Macuch 1963: 54] = “anus, derrière” [DRS 51], NSyr. būṣā “croupe” (borrowed < Ar.) [DRS] | Ar. būṣ- “fesses” and bawṣ- “3. chairs grasses et molles de fesses”, cf.  $\sqrt{bw\check{s}}$  II (denom.) “avoir les fesses très-grandes” [BK I 178] = būṣ- and bawṣ- “croupe saillante, callypigie” [DRS], cf. also Ar. buṭṭ- (root ext. -ṭ- and -ṭ-?) “2. fondement, derrière avec les parties de la génération” [BK I 140].

<sup>19</sup> Affiliated by K. Nait-Zerrad (DRB l.c.) with a phonologically apparently distinct root, cf. EBrb.: Ghadames ta-baḥṣuṣ “queue d’animal (cheval, chacal)” [Lanfry 1973: 7, #43] || SBrb.: Kel Ui ta-basus-t “queue” [DRB] || NBrb.: Shilh a-baṣṣa ~ a-ṣabba “queue (d’animal)” [DRB] | Tamazight a-baṣṣa, pl. i-baṣṣ-iw-n “queue (d’animal)” [Taifi 1991: 35] = a-bassa ~ a-baṣṣa ~ ta-bzza-t [DRB] (Brb.: DRB 130, 133, 148).

<sup>20</sup> Equated by Ch. Ehret (1995: 112, #101) with Ar. baẓẓ- (verbal noun) “to grow fat” and NOm.: Bench(non) pūḥ “many, much” < AA \* $\sqrt{pūḥ}$ - “to increase (intr.).”

<sup>21</sup> M. Lamberti (l.c.): “Entsonorisierung des Ejektivs” in Oromo.

<sup>22</sup> Whence M. Lamberti (l.c.) set up an “altkuschitische” stem \*b/muḍ- “penis” which he eventually derived from the homophonous verbal root “sprossen” assuming an interchange of \*b- vs. \*m-.

<sup>23</sup> The AA etymology of the Semitic stem has been obscure. The authors of the DRS l.c. assumed a trilateral root manifesting itself in baẓr- (baḍr-) which was secondarily enlarged by an infix nasal or -y- extension: “L’ar. connaît d’autres formes à élargissement” in bunzur- (bunḍur-), bayzar- (bayḍar-). One wonders if and how Ar. biẓrir- (biḍrir-) “(femme) vulgaire, à la langue bien pendue” and ta-baẓrama (ta-baḍrama) “se montrer vulgaire” (Ar.: DRS 61) are also connected to this triradical root. Regarding their reconstruction as “reliable, though attested in Akk. and Ar.”, L. Kogan and A. Militarev (SED l.c.), in turn, were disposed to regard the nasal as part of the original quadrilateral root: in their view, Akk. -ṣṣ- “may point to \* $\sqrt{n\check{s}}$ -”.

~ bunzur- “clitoris” [BK I 139] = baʒr- “clitoris”, cf. baʒr-at- ~ buʒ(ūr)r-at- “1. excroissance (de la lèvre supérieure), 2. (qqf.) touffe de poils (sous l’aisselle, etc.)” [DAFA 695], cf. a root variety in baḍr- “clitoris feminae quae praecidi solet” [Freitag I 128] (Sem.: Holma 1911: 101; DRS 61; SED I 35, #37).

### Mubi-Toram lexemes with \*ɸ- + velars

**154. MT \*ɸāk** “to fear” [GT]: Mubi báágà, ɸígáágà “sich fürchten” [Lukas 1937: 180] = ɸàagá (báágà, ɸígáágà) “craindre” [Jng. 1990 MS: 6], Kajakse ɸàake “peur”, báakì (acc.) “avoir peur”, ɸáakúwò “peureux” [Alio 2004: 240, #52-54], Masmaje ɸàakò “peur” [Alio 2004: 280, #29] | DM \*ɸāk- “to fear” [GT]: EDangla ɸàakē “craindre, avoir peur”, ɸàakīrā “peureux, froussard, craintif, trouillard”, ɸākāw (f) “la peur, la crainte, la frousse, l’effroi, la frayeur, l’angoisse, l’affolement, le trac” [Dbr.-Mnt. 1973: 57] = ɸàākē “fürchten, Angst haben” [Ebobisse 1979: 130; 1987: 83], Bidiya ɸàak (ɸàakí, ɸàakēn), pl. ɸàkàw (ɸàkàawí, ɸàkàawēn) “avoir peur”, ɸàakò (f) “peur” [AJ 1989: 61], Migama ɸáyáw (ɸàyé, ɸàyàkká) [-y- < \*-k-?] “craindre”, ɸáyàakà (m), ɸáyàaká (f), pl. ɸáyàakée “peureux”, ɸáyáakí (f) “la peur” [JA 1992: 73] || NAgaw: Bilin bayāy-ā “Schreck, Bestürzung” [Reinisch 1887: 71] || ECu. \*ɸak- “to be afraid” [Sasse 1982: 32]: e.g. PNSomali \*ɸaq- “to be afraid” [Ehret & Nuuh Ali 1984: 228]: Somali báq-a ~ báy-a “Furcht, Schreck” & “sich fürchten” [Reinsich 1902: 79] = báq-ayya “to be(come) afraid” [Abraham 1964: 27] || SCu.: perhaps Ma’a bug-ú [-g- irregular < \*-k-] “fear, doubt”, bug-é “coward”, -bugéno “to fear” [Ehret 1980: 138, §I.A.45].<sup>24</sup> So far, within the MT group, only the Mubi reflex has been involved in the AA comparison, cf. IS 1966: 28 (Mubi-Bilin-Somali); Dlg. 1966: 50; 1967: 9, #6; 1973: 265 (Bilin-ECu.-Mubi); SISAJa I #81 (Bilin-ECu.-WCh.-Eg.); HCVA II #93 (Cu.-ECh.).

**155. Mubi ɸók** “1. (tr.) gießen”, 2. (intr.) regnen” [Lukas 1937: 181] = (?) \*ɸok “rain” [Doornbos-Bender 1983: 77, #63] | Tumak ɸōg “verser (vider)” [Caprile 1975: 50] | presumably DM \*ɸok- “1. to issue, 2. appear” [GT]: WDangla ɸókè “apparaître, surgir” [Fédry 1971: 106], EDangla ɸòkē “apparaître, surgir, jaillir” [Dbr.-Mnt. 1973: 59], Bidiya ɸok (ɸokí, ɸoken), pl. ɸokow (ɸokoowí, ɸokoowēn) “jaillir”, ɸòkòɸòkò (m) “issue de secours dans un terrier de rats” vs. ɸook (ɸookí, ɸookēn), pl. ɸokòw (ɸokòowí, ɸokòowēn) “1. apparaître, 2. pousser” [AJ 1989: 62] < ECh. \*√ɸg “to pour” [JS 1981: 206A<sub>2</sub>] = \*ɸok- > \*ɸok- “to flow” [Stolbova 1996: 126] = \*ɸok- < \*\*bōk- (via metathesis of glottalization) “1. to issue (intr.), 2. pour out” [GT] || PCu.-Om. \*bVḵ(k)<sup>w</sup>- (?) “течь” [Dlg.] = PCu. \*ɸok- “to be moist” [Ehret 1987: 16, #12] > NAgaw: Bilin ɸoq-s, ɸuq-s (caus.) “ausgießen, vergießen” [Reinisch 1887: 76], Kemant ɸoḥ-t y (refl. pass.) “se verser, être versé”, ɸoḥ-š y “verser, répandre” [CR 1912: 176], cf. also Bilin ɸkū “couler” [Cohen] = ɸāqū, ɸawq “gerinnen (Milch)”, ɸoq “Tropfen”, ɸoq y “tröpfeln” [Hintze 1951: 84, #385 pace Reinisch], Kemant ɸaḥ- “to be moist” [Ehret 1987: 16, #12] (NAgaw: Hohenberger 1978: 45 with false AA comparanda) ||

<sup>24</sup> Combined in Ehret l.c. with ERift: Qwadza beʔ-et- “to scorn” < SCu. \*bō/ḵ- “to avoid, keep away from, have an aversion to”, which is semantically all too vague.

ECu.: Yaaku -poq- [p- reg. < \*b-, also AA \*p-?] “to pour in” [Heine 1975: 131] || SCu. \*bōk(w)- “showers, mist, drizzle” [Ehret 1980]: Qwadza boʔ-uto [-ʔ- regular < \*-k-] “dew” | Ma'a i-buk-éta ~ i-buḥ-éta “long rains (March-May)” (SCu.: Ehret 1980: 138, §I.A.44; Cu.: Ehret 1987: 16, #12) || NOM. \*buk-/\*buk- “to rain” [GT]: Ometo \*buk- “to rain” [GT]: cf. esp. Kachama bāq, buq [CR] = boḵ- [Blažek], Gamu buḵ- [Blažek], Wolamo buḵ- “pleuvoir” [Cerulli], Haruro boq-āys “piovere” [CR 1937: 641] (NOM.: Bender 1987: 34, #63.b; LS 1997: 316; Blažek p.c.) || SBrb.: Ahaggar a-həḡ “2. recueillir du liquide” [Prasse 1969: 63, #337] || Sem.: PAR. biliteral \*√bq = \*buq “лечь, течь” [Belova 1993: 35, #29] = \*√bk “to flow” [Ehret 2000 MS: 7, #1056] > Ar. baqqa “2. verser beaucoup de pluie, de grandes et abondantes pluies (se dit du ciel)” [BK I 148, 143] = baqqa “1. to pour, 2. sprinkle, 3. speak much” [Zaborski 1971: 56, #18 with its biliteral Sem. background] vs. baʿaqa “arroser copieusement (se dit d’un nuage)” [BK I 148, 143] = baʿaqa “arroser le sol” [Cohen] = “verser abondamment” [DRS] vs. bawq- “shower” [Ehret]<sup>25</sup> < PAA \*√bk vs. \*√bk (both varieties are attested) “1. to pour, hence: (to) 2. rain, 3. snow” [GT]. The reflexes of this and some further root varieties below have been time to time connected in the comparative literature:<sup>26</sup>

**155.1. PAA \*√bk** “1. to pour, hence: (to) 2. rain, 3. snow” [GT] is attested in NBrb.: Shilha a-bukku “neige” [DRB], Shilha of Tafilalt a-bōkko “neige” [Laoust 1920: 189] | Beni Snus t-bika & t-biša [-š- < -k-], Figig t-biša “pluie” [DRS] (NBrb.: DRB 10, 49) || PCu.-Om. \*bVkk<sup>w</sup>- “дождевая туча (rain cloud)” [Dlg.]: PCu. \*b/pok<sup>w</sup>- “mist, drizzle” [Ehret 1987: #98]:<sup>27</sup> Beja bayúk [-k < both AA \*-k and \*-k] “Schnee” [Seetzen] || LECu.: Oromo bokk-ā “rain(fall)” [Bitima 2000: 62] (Oromo: Blažek 2010: 38 based upon, i.a., LVC 1992; LECu.: Dlg. 1973: 270) || NOM. \*buk “rain” [Bender 1987: 34, #63.b; 1994b: 1157, #63] = \*buk-/\*buk- “to rain” [GT]: cf., e.g., NWometo \*buk- “to rain” [Bender 2003: 120, #105b]; Wolayta buk- “to rain” [LS], Malo buk- [Bender], Dawro buk- “to rain” [LS], Dache buk- “to rain” [LS], Oyda buk- “to rain” [Fleming apud Bender 2003: 61, #105b] (NWometo: Bender 2003: 22, #105b) | SEOmt. \*buk- “to rain” [Bender 2003: 92, #105b]: Koyra buk/tt- [Hayward], Zergulla buka “1. to hit, 2. rain” [Linton] etc. (SEOmeto: Bender 2003: 333, #43) | Gimirra-Benesho (Bench-non) buk 3-4 [Breeze], She buka [Fleming] “to rain” (Gimirra: Bender 2003: 171, #105a) | Kafa-Bosha buči/ye “rain” [Fleming & Lewis in Bender 2003: 171, #105a] | Dizi buk-u (vb.) “to rain” [Toselli in Bender 2003: 215, #105] (NOM.: Bender 1987: 34, #63.b; 1988: 149; 2003: 22, #105b; 2003: 241, #105b; LS 1997: 316; Cu.-NOM.: Dlg. 1973: 270; Bender 1994b: 1157, #63) || WCh.: Hausa bíkò “2. rain which succeeds sowing” [Bargery 1934: 106] = mú sàámí bíkò “3. rain fell after we’d sown our crops” [Abraham

<sup>25</sup> Derived by Ch. Ehret (2000 MS: 4, #1038) as a C<sub>3</sub> \*-k “intensive of effect” root extension derivative of AA \*√bāw- “to flow” based on PSem. \*√bwl “to flow out” (“finitive” extension \*l), LECu.: Arbore baww “lake” (sic).

<sup>26</sup> ECh.-Ar.: Stolbova 1996: 126; Ar.-Cu.: Cohen 1947: 173, #385; Agaw-Ar.: Dlg. 1966: 50; 1973: 274; DRS 74-75; Sem.-Brb.-Cu.: Diakonoff 1992 MS: 12; Ar.-Mubi-Agaw: HCVA II #96: HSED #199; Koyra-PCu.: Ehret 1995: 83, #12; Cu.-Sem.: Ehret 2000 MS: 7, #1056.

<sup>27</sup> The Koyra-PCu. isogloss was combined in Ehret 1995: 83, #12 with Sem.: Ar. bakk- (verbal noun) “to vomit” < AA \*-bōk<sup>w</sup>- “to leak, seep, run out”.

1962: 100] = *bükò* (sic) [Stolbova] | AS \**p<sup>h</sup>uk* [GT]: Goemay phuk (so, ph-) “to empty the contents of a vessel into another one with short and sudden movements” [Sirlinger 1937: 178].

**155.2. PAA** \**√pk* “to pour” [GT] > SBrb.: EWImd. *tè-ffīəy-dū* “transvase-le donc” [Nicolas 1957: 574] || ECu.: perhaps Yaaku -poq- [p < both AA \*b and \*p?] “to pour in” [Heine 1975: 131] || CCCh.: Hitkala (Hide, Lamang) *pya* “1. verser, renverser, 2. déshabiller” [Eguchi 1971: 224]. Cf. also Takacs 2006b: 128 for the supposed Angas reflex.

**155.3. SAA** \**√bg* “to pour” [GT] = \**-beg-* “to spill, pour (intr.)” [Ehret 2000 MS: 4, #1038]<sup>28</sup> > ECu. \**beḥ-* “to pour, spill (intr.)” [Ehret]<sup>29</sup> || WCh. \**√bg* “to pour” (in NBauchi and Ngizim) [JS 1981: 206A<sub>1</sub>].

**155.4. PAA** \**√pk* (var. \**√pQ*?) “to pour out” [GT]: Brb. \**√fk* “to pour” [GT]<sup>30</sup> > EBrb.: Audjila *e-ffok, ffok* (tr., intr.) “1. versare (verser), 2. colare (couler)” [Paradisi 1960: 177 quoted also in DRB] || WBrb.: perhaps Zenaga *e-ffug* “verser” [TC 2008 quoted in DRB 541, FG16: isolated] || SBrb.: Ghat *ə-ffək* (DRB: *f pharyngalisé*) “verser, être versé” [PAM 2003: 156] (Brb.: DRB 551) || PCh. \**√pg* “to pour” (in CCh., Kera) [JS 1981: 206A<sub>3</sub>] > WCh.: AS \**p<sup>h</sup>uk* [GT]: Goemay phuk (so, ph-) “to empty the contents of a vessel into another one with short and sudden movements” [Sirlinger 1937: 178] (Takacs 2004: 291: isolated in AS) || CCCh.: Bachama *púko* “to pour” [Carnochan 1975: 465] || ECh.: Kera *púki* “vergießen” [Ebert 1976: 89] | EDangla *pàke* “gießen” [Ebobisse 1979: 126; 1987: 84]. See also EAAN I 81, #367.

**156. MT** \**ḃokl-/\*koḃl-* “hinder part” [GT]: Kofa *bòkólà* (f), pl. *bòkál* “anus” [Jng. 1977 MS: 4, #34], perhaps Toram *kòbele* [met. < \**ḃokl-*] “fesses” [Alio 2004: 258, #249] || WCh.: Angas-Sura \**ḃalak* (or \**ḃolok*?) [GT]: Kofyar *ḃàlòk* (so, -a/-o-!) “bottom, anus” [Netting 1967: 2] (Takacs 2004: 26: isolated in AS).<sup>31</sup> This root with these three radicals disposed to metathetic shifts (including an \*-l-) seems at the moment to be only present in Chadic. Still, may one present here a striking set of highly puzzling candidates for being reflex of an almost homophonous triradical PAA root (with an unknown sibilant in the place of \*-l-):

**156.1. S<sup>2</sup>AA** \**√bkS* (denoting some hinder or bottom part of the body) [GT] > Eg. *bqs.w* [irregular -s- < AA \**-Ṣ-* ~ \*-l-?]<sup>32</sup> “Rückenwirbel, Wirbelsäule(kanal)” (PT, Wb I 480, 8-12;

<sup>28</sup> Based by Ch. Ehret (2000 MS: 4, #1038) on Sem.: Ar. *baḡs-* (verbal noun) “to gush forth”, Eg. *bg3.w* “ship-wrecked man” < \**“drenched person”*, LECu.: Afar *baggad-* “to become wet”, *bagg-eḏ-o* “diarrhea”, WCh. \**√bg* “to pour”, most of which are semantically certainly unrelated.

<sup>29</sup> Affiliated by Ch. Ehret (1995: 89, #31; 2000 MS: 533, #31) with Sem.: Ar. *baḡḡ-* “to sprinkle, drizzle”, Eg. (NK) *bḥ* “to give birth”, NOm. \**buk-* “to sow (i.e.: scatter seed)” < AA \**-bē/ōḡw-* “to spill out in drops, sprinkle”.

<sup>30</sup> K. Naït-Zerrad (DRB 541, FG16 and 551, FK8) affiliated these Berber roots with a velar C<sub>2</sub> to his FY3 root.

<sup>31</sup> G. Takacs (l.c.) was puzzled about the obscure reasons of the vowel disharmony and its etymology merely speculating about an unidentified compound or an unnatural etymon \**ḃalwak* (\**-l<sup>w</sup>-?*). Now, instead of either way, the East Chadic match settles the matter by suggesting an original triradical root.

<sup>32</sup> There are at least ca. half a dozen (or maybe even a bit more) of certain cases where the anomalous correspondence Eg. s vs. Sem. \*ṣ is attested (see EDE I 199-201). Thus, it cannot be excluded that -s in Eg. *bqs.w* too was sprung from a lateral sibilant. In principle, we may assume an alternation of the AA lateral sibilant with \*-l- in this root on the NAA analogy of Ar. *mal<sup>3</sup>-* “troupe, bande, partie” [BK II 1149] ~ Eg. *mš<sup>c</sup>* “Heer, Truppen” (OK, Wb II 155, 2-19) = “1. Truppe, Heer, 2. Armee, Fußvolk, Infanterie, 3. Arbeitertruppe, Expeditionstruppe” (ÄWb I 570) or Ar. *mala<sup>3</sup>a* “marcher avec rapidité, d’un pas léger et rapide (se dit d’une chamelle)” [BK II 1149] vs. Ar. *maša<sup>3</sup>a* “3. marcher, doucement” [BK II 1111] ~ Eg. *mš<sup>c</sup>j* “1. marschieren (von den Soldaten), reisen, 2. (sich)

so also Grapow 1954: 57; GHWb 263) = “spine” (FD 85)<sup>33</sup> ||| NBrb.: just an improbable reflex in Mzg.<sup>34</sup> ||| LECu.: uncertain reflex in Oromo<sup>35</sup>. If the Chado-Egyptian match proves true (even when/if we rightly refute the unreal phantom traces of an SAA  $*\sqrt{b}ks$  “back” in Oromo and Tamazight), we might set up an ancestral (Eg.-Ch.) set of common root varieties  $*\sqrt{b}k\hat{s} \sim * \sqrt{b}kl$  “back” [GT]. Moreover, this supposed latter parental root appears to have a strikingly similar triradical variety in Central Chadic with a variation or shift of \*l vs. \*r: **156.2. CCh.**  $*\sqrt{b}K\mathbf{r}$  (???)<sup>36</sup> >  $*\sqrt{b}gl$  “back” [GT],<sup>37</sup> cf. presumably Tera bigirsa [-rs- < \*-ls-?] “back” [Meek apud JI, otherwise in Newman 1964] | Higi-Bana buguló-nga “(mein?)

bewegen (Füße, Überschwemmungswasser), 3. Reise, Marsch” (NK, Wb II 156, 4-12; WD III 57) = “1. zu Fuß gehen, 2. (übertragen) wandeln” (Till 1955: 334, §56) = “to march” (FD 119) = “1. to march, journey, travel, depart, 2. journey, march” (DLE I 245), which might be genetically related to if we assume an interchange of the Psemitic laterals (\*-l- ~ \*-š- > Ar. -l- ~ -š-), cf. Takács (2006a: 113) and EDE III 613-615 and 619-621.

<sup>33</sup> The etymology of this Egyptian anatomical term is even today mysterious, full of stubborn puzzles in spite of numerous alternatives and attempts (critically surveyed in EDE II 331-332): (1) the CCh. root examined above. (2) Sem.: Akk. (SynL) baqašu “etwa: breit”, (jB) baqāšu “etwa: breit sein (i.a. vom Rücken und Stirn)”, (aAK/aB) buququšum “sehr breit” [AHW 104, 139] = (Standard Bab.) baqāšu “to become enlarged (?), protruding (?)”, cf. buququšu (adj. describing a characteristic bodily trait, occurs always as a personal name in Oakk., OBab.), cf. buqāšu (subst., meaning unknown, occurs as a personal name in Oakk.) [CAD b 99, 325, 323, resp.].? For the supposed Ugaritic cognate of the Akk. term cf. Watson 1993: 214. (3) In spite of its homophony, the isogloss of SCu.: Qwadza beʿes-iko [-ʔ- regular < -ʔ/ʕ/k/h-] (pl. of belendayo) “shoulders” [EHret 1980: 142, §I.A.74 with a semantically false derivation] ||| CCh.: PMandara \*bagaža “shoulder” [GT] (Mandara: Wolff 1983: 224), for which cf. perhaps Eg. bgz.w “als Körperteil des Sternbildes ‘Riese’” (NK, Wb I 483, 1) = bgz.t “\*Hüfte (Teil des Sternbildes ‘Riese’ in den ramessidischen Sternuhren, zwischen Oberschenkel und Brust)” (GHWb 264)? Act. \*bqs.(t/w)? Probably to be distinguished from LEg. bgz “Kehle (?)” (GR, Wb I 483, 2)? Perhaps the SCu.-CCh. root was of biliteral origin, cf. NBrb.  $*\sqrt{b}gy$  (?) [GT]: Tamazight ta-bužžu-t “biceps (muscles)”, a-bužž “(avant-)bras”, perhaps also ta-bža “1. étui à collyre, 2. flûte (en roseau)” [DRB 43, BJ3] ||| WCh.: Bole-Tangale \*baka “shoulder” [Schuh 1984: 212]. As areal parallel cf. PBantu \*-bègà “shoulder” [Guthrie 1971: 118]. (4) The equation of Eg. bqs.w with LECu.: Oromo buqus-ē “vagina” [Gragg 1982: 69] = buquš-ē [Hudson 1989: 161] is perhaps plausible. In principle, a semantic development “vagina” < “\*bottom” < “\*back” should not be ruled out. (5) G. von der Gabelentz (1894: 160-161) affiliated Eg. begsu (sic) with Basque beso “Arm”, EBrb.: Ghadames u-fus, NBrb.: Qabyle a-fus and SBrb.: Twareg a-fūs “Hand” and Twareg te-bbis-t “Handvoll”, which is certainly false. (6) C.T. Hodge (1989: 14; 1990: 653; 1992: 15; 1994: 532) saw in Eg. bqs.w an alleged \*b- “place prefix” attached to Eg. qs “bone”. Unconvincing, since no convincing evidence was offered for that kind of b- prefix, let alone that one does not necessarily associate just “back” as the “place of bone”. (6) Ch. EHret (1997 MS: 8, #1052) compared Eg. bqs.w “spine (?)” to LECu.: Oromo boqq-ō “neck, back of the neck”, derived from AA  $*\sqrt{b}ûk$ - “to bend (body)” based on HECu.  $*bo/\hat{o}k$ - “to bend” [EHret] ||| POM.  $*bo\hat{k}$ - “knee” [EHret] ||| WCh.: Ngizim bəgbăk “side just above hipbone and below ribs” [Schuh 1981: 15].

<sup>34</sup> Cf. Mzg. a-baqis “coup donné avec la main ouverte sur le dos de l’autre main” [Taïfi 1991: 24], where, however, the basic sense was connected with hitting and not the back, since K. Naït-Zerrad (DRB 88) convincingly affiliated it with NBrb.: Qabyle beqqes “gifler, souffleter (coups plus modérés que beqqed)”, i-beqqis “gifle” [Dallet 1982: 35].

<sup>35</sup> Cf. Oromo buqus-ē “vagina” [Gragg 1982: 69] = buquš-ē “vagina” [Hudson 1989: 161] = buququš-ā “vagina (usually polite and of female children)” [Bitima 2000: 68]. In principle, a semantic development “vagina” < “\*bottom” < “\*back” should not be ruled out, but one would, of course, need further (LE)Cu. data for this purpose.

<sup>36</sup> H. Jungraithmayr and D. Ibrizimow (l.c.) derived the Tera and Masa parallels from their common Ch.  $*k$ -r “back”, which seems to be challenged by phonological difficulties (e.g., Masa -l vs. PCh.  $*-r$ , Tera & Masa -g- vs. PCh.  $*k$ -), also by the initial b- in CCh. (hardly a prefix), and by the comparison with Eg. bqs.w proposed here.

<sup>37</sup> Where the third consonant might be a complement attached to the same biconsonantal PAA root (or its variety) that might be present in the rest of the biconsonantal parallels.

Rücken” [Lukas 1937: 130] | PMusgu \*bUgol “back” [GT]: Musgu \*bogól, pl. \*bogolakái “Buckel”, Lukas: “zu erschließen aus” že-bogól, fem. ebenso oder že-bugulíí “bucklig” (Krause) [Lukas 1941: 48], Mbara b̀̀gól “derrière” [TSL 1986: 255] | PMasa \*√bgr ~ \*√bkr > \*√bgl “back” [GT]: Masa búgól “dos” [Mouchet] = búgól-lá “Rücken” [Jng. 1971-2, so also in JI] = búkol [b̀̀gól̩lā] “1. le dos, 2. l’arrière (p.ex. de la case), 3. derrière, 4. après, 5. [b̀̀gól̩lā] ensuite” [Caïtucoli 1983: 51-52], Masa-Bongor búgól-lá “dos” [Jng. 1971/2 MS: 71], Gizey/Wina b̀̀gól, Masa b̀̀gól ~ b̀̀gól, Ham b̀̀gól, Lew b̀̀gól, Marba b̀̀gól “derrière” [Ajello et al. 2001: 20], Ham, Lew b̀̀gól, Marba b̀̀gól “derrière” [Ajello et al. 2001: 6], Gizey/Wina b̀̀gól, Masa b̀̀gól, Ham b̀̀gól “dos, derrière” [Ajello et al. 2001: 21], Lame bākír “revers, dos” [Sachnine 1982: 287], perhaps also (via metathesis???) Zime-Dari kàʔb̀̀ròʔ “revers (tissu)” [Cooper 1984: 11] (CCh.: JI 1994 II 7).

The initial \*b- in these reflexes apparently testifies to a non-glottal C<sub>2</sub> whose plain voiced/-less velar left the Anlaut also untouched without the obligatory transposition of glottalization. In addition, further biliteral parallels seem to speak for analyzing the third consonant in as a C<sub>3</sub> \*-r<sup>38</sup> complement whereby the primary PAA root was extended.

**156.3. P<sup>3</sup>/SAA \*√bḵ ~ rare variety \*√bk** “1. thigh, 2. hind parts, 3. tail (?)” [GT]<sup>39</sup> > Eg.: dubious, no direct reflex<sup>40</sup> ||l NBrb.: perhaps Shilh ta-baqqu-t “queue”, a-baqqu “verge”, var. (t)a-bakku-(t) “petite queue d’animal” [DRB 86, BQ9 and 48, BK21, resp.: both isolated in Berber] ||l NOM. \*bU/ʌḵ- > \*bunḵ- (via epenthetic nasal) “1. thigh, 2. buttocks” [GT]: POMeto \*bunḵ- “thigh” [GT]: Gamu bunḵ- “buttocks” [Moreno in Bender 2003: 315, #10] | Ganjule ʔbūga “thigh” [Siebert & Hoeft] and Zayse ʔbuḵa “thigh” [Siebert & Hoeft] = bunḵ- “thigh” [Hayward in Bender 2003: 89, #77], Zergulla būḵa “upper leg” [Bender 2003: 87, #55b] (isolated in SEOMeto: Bender 2003: 336, #100) | Gimirra \*baḵ “buttocks” [GT]: Benesho baḵ [Breeze] = baḵʔ [Fleming], She bak [Montandon], all signifying “buttocks” (Gimirra: Bender 2003: 339, #10) | Dizoid \*bok/g- (?) “thigh” [Bender 2003: 255, #A100]: in fact, Dizi baḡaḡ [Fleming], Sheko b̀̀ka [Aklilu] = boka [Fleming] “thigh” (isolated in Dizoid apud Bender 2003: 352, #100) ||l WCh.: perhaps Pero púká [< \*buk- with irregular p- < \*b-???] “thigh (animal)” [Frj. 1985: 47].

**156.1. PAA \*√bg(w)** “1. anus, 2. back” [GT] > SBrb.: (?) EWlmd.-Ayr ḇāḡāw “être injecté par l’anus (liquide servant de clystère)”, te-ḇāḡāw-t “tube servant à injecter un liquide par l’anus, clysoir” [PAM 1998: 6] ||l LECu.: Baiso baḡa “back” [Fleming 1964: 46] = ḇeḡet

<sup>38</sup> Which is challenged by H. Jungrauthmayr’s (JS 1981: 32A; JI 1994 I 3A) hypothesis on its derivation from the biradical PCh. \*-kr “back” by a prefix \*b- of unknown signification. Still, much likelier appears the case of C<sub>3</sub> ext. \*-r here, this latter here being not uncommon as a fossilized nominal class marker in some other segment of the AA anatomical terminology, cf. Takács 1994; 1995: 101, #2; 1997: 247.

<sup>39</sup> One wonders if the same root is retained by NBrb.: Nefusa te-bga “tibia” [DRB 33, BG18] ||l WCh.: (???) Gerka bak “leg”, bok “foot” [Ftp. 1911: 216, 208]. G. Takács (2004: 18) assumed Gerka gḇak (so, gb-) [Jng.] to be a misrecorded form of an irregular reflex of AS \*ḵak ~ \*ḵw̱ak “leg etc.”. Is Gerka b- [Ftp.] < \*gb- < \*g̱w- < \*ḵw- to be assumed just like in Gerka purrum “blacksmith” [Ftp. 1911: 215] < AS \*ḵw̱alam ~ \*ḵw̱olom “to forge iron”, where the shift of Gerka p- < \*ḵw- via \*kp- (?)?

<sup>40</sup> It would be tempting, of course, to segment in Eg. ḇq̱s.w “Rückenwirbel, Wirbelsäule(nkanal)” (PT, Wb I 480, 8-12) = “spine” (FD 85) the PAA root \*√bḵ above, but we know of no nominal class marker \*-s whatsoever that might be identified with its C<sub>3</sub>.

“back” [Siebert 1994: 11] || WCh.: unlikely reflex in Ngizim<sup>41</sup> || ECh.: Modgel bégu-am “mein Arsch” [Lukas 1937: 96] | Mubi bük (m), pl. bòogàk “1. reins, 2. derrière” [Jng. 1990 MS: 6]. Cf. EDE II 331.

### Mubi-Toram lexemes with \*ḡ- + sonants

**157. Kofa ḡúḡgúm** (m), pl. ḡúḡgàm “baboon” [Jng. 1977 MS: 12, #291] (GT: isolated in MT?) || WCh. \*bang(ay)- or \*bangʷ- (?) “baboon” [GT]: Ngamo bàḡəy “baboon” [Kraft], Kirfi bàḡó “baboon” [Schuh 1978: 139], Tangale pàḡum [p- < \*b- poss.] “monkey” [Kidda 1985: 210, #317], Pero pyəḡàn [p- regular < \*b-?] “monkey” [Kraft] | Bade bàḡēn “baboon” [Kraft] = ḡāḡēn (sic: ḡ-) [Stolbova], Ngizim báḡāi, pl. báḡāḡin “anubis baboon” [Schuh 1981: 21] = bangəi “baboon” [Kraft] = bangži “monkey” [Stolbova] (WCh.: Kraft 1981, #163-#164). This Chadic stem seems for me to be isolated in the whole AA family.<sup>42</sup> One might therefore suppose perhaps a remote loaning from Kanuri bungwoi “black dog-faced baboon” [Schuh] or its ancestral etymon.

**158. Masmaje ḡarə** “tige d’épis de mil” [Alio 2004: 280, #30] || SCu.: Alagwa bar-is- (caus.) “to grow (of plants)” [Ehret 1980: 320, #1]<sup>43</sup> || Eth.-Sem. \*ḡbhr: Tna. bəhar, bahar

<sup>41</sup> One may be perhaps tempted to compare here Ngizim bəḡbák “side just above hipbone and below ribs” [Schuh 1981: 15] also, but it seems better related to a distinct root, namely LECu.: Somali bog “flank”, Oromo buke “flank” (LECu.: Zaborski 1975: 327) | HECu.: Burji and Hadiya bakko “beside” (HECu.: Sasse 1982: 38).

<sup>42</sup> As its third radical \*-g can hardly be treated here as a root extension for the time being, it seems to represent a root distinct from PCh. \*ḡbn (prob. \*bin-) “monkey” [GT]: WCh.: Siri bini [Skinner 1977: 11] || CCh.: Fali beno [Strümpell 1922-3: 133] | Gude məbin [OS], Bachama məbwən [OS] | Banana vīna [Kraft], Musey fina [Kraft] (CCh.: Kraft 1981: #163). N. Skinner (1977: 11), O.V. Stolbova (1987: 249), and V.É. Orel & O.V. Stolbova (OS 1992: 183; Orel 1993: 43; HSED #335) equated some of these parallels with Eg. bnw “Pavian” (BD, Wb I 458, 6) = bnw “ein Pavian” (GHWb 253). Whether this Chado-Egyptian isogloss has something to do also with PCh. \*bUm- “baboon” [GT] (?) > WCh.: Geruma bomi “baboon” [Gowers apud Schuh 1978: 139] | Nbauchi: Pa’a ḡun “monkey” [Skinner] = ḡūn, pl. būnāni “baboon” [M. Skinner 1979: 168], Kariya bum “baboon” (Nbauchi: Skinner 1977: 11) | Sbauchi: Polchi vuūm “baboon” [Kraft] || CCh.: Gudu bœ:m “baboon” [Kraft] (W-CCh.: Kraft 1981: #164) || ECh.: (???) Dangla-Migama \*ḡambaʷam [GT]: EDangla àmbām “chimpanzé” [Dbr.-Mnt. 1973: 12], Bidiya ʷàmbàʷàam (m) “singe sp.” [AJ 1989: 52], is uncertain. N. Skinner (l.c.) and O.V. Stolbova (l.c.) agree in equating Pa’a ḡun and Kariya bum with Siri bini “monkey” above (served by Stolbova from her Nbauchi \*bAni with \*-n-), which seem to me to better represent two separate roots. It would be equally difficult to suppose a process \*bVrVm > \*bVm in these languages. C.T. Hodge (1968: 26) and V. Blažek (1984: 443-444) connected Eg. bnw and PCh. \*ḡbn with the reflexes of PCh. \*ḡbd “monkey” and PCh. \*ḡbr “monkey”, which are unrelated (cf. the entries of Eg. b3bj and bntj in EDE II 70-73 and 235-237, resp.). In Chadic studies too, these apparently distinct roots are usually derived from the very same source, although the phonological anomalies are not (cannot be) explained. In spite of H.G. Mukarovsky (1987: 258), PCh. \*ḡbn seems to be unrelated to LECu.: Somali wānn- “Colobus guersa Riipp., eine Affengattung, deren Schwanz als Zierde des Schildes gebraucht wird” [Reinisch 1902: 379] | Oromo wenni (w- rendered as ū-, i.e., ʷ-) “scimmia agilissima che vive sulle cime dei grandi alberi (per terre sembra perdere la sua agilità, la sua pelliccia è bellissima e serve come ornamento agli uomini d’armi)” [da Thiene 1939: 334] = wēnni “monkey (= gureza of Amh.)” [Gragg 1982: 403] = wani ~ weni “Colobus monkey” [Mukarovsky] | HECu.: Burji woyn-ə “Colobus monkey” [Sasse 1982: 191].

<sup>43</sup> Derived by Ch. Ehret (l.c.) from SCu. \*bad- “much, many” based solely on this single form and its comparison with LECu.: Somali badan, badi- “to be many”.

“grand, fort”, Tigre bāharat “qui poussent, germent” (ES: DRS 49, BHR1 with semantically vague parallels) < PAA \* $\sqrt{b(h)r}$  “to grow (primarily of a plant?)” [GT].

**159. MT \* $\text{b}\bar{\text{e}}\text{r}$ -** “slave” [GT]: Mubi  $\text{b}\bar{\text{e}}\text{r}$  (m), pl.  $\text{b}\bar{\text{e}}\text{r}\bar{\text{e}}$  “Sklave” [Lukas 1937: 180] =  $\text{b}\bar{\text{e}}\text{r}$  (m), pl.  $\text{b}\bar{\text{e}}\text{d}\bar{\text{o}}\text{r}\bar{\text{u}}\text{r}$  “esclave” [Jng. 1990 MS: 6], Masmaje  $\text{b}\bar{\text{e}}\text{r}\text{u}\text{ng}\bar{\text{o}}$  “esclave” [Alio 2004: 280, #31], Birgit  $\text{b}\bar{\text{e}}\text{r}\bar{\text{n}}\bar{\text{a}}$  (m), pl.  $\text{b}\bar{\text{e}}\text{r}\bar{\text{n}}\bar{\text{e}}\text{y}$  “esclave” [Jng. 2004: 351], Kofa  $\text{b}\bar{\text{e}}\text{r}\bar{\text{r}}\bar{\text{o}}$  (m),  $\text{b}\bar{\text{e}}\text{r}\bar{\text{r}}\bar{\text{e}}$  (f), pl.  $\text{b}\bar{\text{e}}\text{r}\bar{\text{r}}\bar{\text{a}}\bar{\text{n}}$  “slave” [Jng. 1977 MS: 15, #388] | DM \* $\text{b}\bar{\text{e}}\text{r}\text{n}$ - “slave” [GT]: WDangla  $\text{b}\bar{\text{e}}\text{r}\bar{\text{n}}\bar{\text{e}}$  “esclave” [Fédry 1971: 106], EDangla  $\text{b}\bar{\text{e}}\text{r}\bar{\text{r}}\bar{\text{e}}$  [ $\text{b}\bar{\text{e}}\text{r}\bar{\text{r}}\bar{\text{e}}$ ] (m) “l’esclave, l’enfant abandonné que l’on prend en charge” [Dbr.-Mnt. 1973: 58], Korlongo  $\text{b}\bar{\text{e}}\text{r}\text{r}\bar{\text{e}}$  “esclave” [Fédry], Bidiya  $\text{b}\bar{\text{e}}\text{r}\bar{\text{n}}\bar{\text{o}}$  (m),  $\text{b}\bar{\text{e}}\text{r}\bar{\text{n}}\bar{\text{a}}$  (f), pl.  $\text{b}\bar{\text{e}}\text{r}\bar{\text{n}}\bar{\text{a}}$  “esclave”,  $\text{b}\bar{\text{e}}\text{r}\bar{\text{n}}\bar{\text{e}}\text{w}$  ( $\text{b}\bar{\text{e}}\text{r}\bar{\text{n}}\bar{\text{i}}\bar{\text{w}}\bar{\text{i}}$ ,  $\text{b}\bar{\text{e}}\text{r}\bar{\text{n}}\bar{\text{i}}\bar{\text{w}}\bar{\text{e}}\text{n}$ ), pl.  $\text{b}\bar{\text{e}}\text{r}\bar{\text{n}}\bar{\text{e}}\text{w}$  ( $\text{b}\bar{\text{e}}\text{r}\bar{\text{n}}\bar{\text{e}}\text{w}\bar{\text{i}}$ ,  $\text{b}\bar{\text{e}}\text{r}\bar{\text{n}}\bar{\text{e}}\text{w}\bar{\text{e}}\text{y}$ ) “asservir” [AJ 1989: 62] < ECh. \* $\text{b}\bar{\text{e}}\text{r}$ - “slave” [GT] || WCh.: PGoemay \* $\text{b}\bar{\text{a}}\text{r}$  “to salute with humility” [GT]: Goemay  $\text{b}\bar{\text{a}}\text{r}$  “to show obedience” [Sirlinger 1937: 9] =  $\text{b}\bar{\text{a}}\text{r}$  “to salute, prostrate” [Hellwig 2000 MS: 2] (Takacs 2004: 28: isolated in AS) || Eg.  $\text{b}\bar{\text{a}}\text{r}$  [-3 regular < \* $\text{r}$ ] “jemanden bedienen” (PT, Wb I 177, 4) || Sem.: Ar.  $\text{b}\bar{\text{a}}\text{r}$  I “1. puiser de l’instruction dans un exemple, dans qqch. qui offre des exemples”, VIII “1. considérer avec attention, observer, 3. regarder qqch. comme un exemple dans lequel on doit puiser un enseignement, s’instruire par des exemples, par ce qui arrive à d’autres, 4. examiner avec attention et calculer, supputer, 5. considérer, respecter qqn., 6. avoir égard à qqch., faire attention”, VIII au passif: “1. être considéré, respecté, 2. être l’objet de l’attention”, X “4. s’instruire par des exemples, par ce qui arrive aux autres” [BK II 152-153] < PAA \* $\sqrt{\text{b}\bar{\text{e}}\text{r}}$  “1. to obey (an instruction), 2. serve so.” [GT].<sup>44</sup> There are further parallels with plain b-tempting at the first glance to be conceived as cognate, which may well turn out to be misleading.<sup>45</sup>

**160. MT \* $\text{b}\bar{\text{i}}\text{r}$ - ~ \* $\text{b}\bar{\text{i}}\text{r}$ -** “to fly” [GT]: Mubi  $\text{b}\bar{\text{i}}\text{r}$  ( $\text{b}\bar{\text{e}}\text{r}$ ,  $\text{b}\bar{\text{i}}\text{r}\bar{\text{a}}$ ) “voler (oiseau)” [Jng. 1990 MS: 5], Birgit  $\text{b}\bar{\text{e}}\text{r}\bar{\text{i}}$  ( $\text{b}\bar{\text{e}}\text{r}\bar{\text{a}}$ ,  $\text{b}\bar{\text{e}}\text{r}\bar{\text{o}}$ ) “voler” [Jng. 2004: 351], Masmaje  $\text{b}\bar{\text{i}}\text{r}\bar{\text{e}}\text{e}\text{t}\bar{\text{i}}$  “concourir” [Alio 2004: 280, #32] | Bidiya  $\text{b}\bar{\text{i}}\text{r}\bar{\text{b}}\bar{\text{i}}\text{r}\bar{\text{i}}\text{n}\bar{\text{y}}$  “idéo. de tourner dans l’air” [AJ 1989: 62]: < ECh. \* $\text{b}\bar{\text{i}}\text{r}$ - “to fly” [GT] || NSem. \* $\sqrt{\text{b}\bar{\text{i}}\text{r}}$  “to fly up” [GT]: Akk.  $\text{abru}$  “Flügel, Flosse” [AHW 7] || Ug.  $\sqrt{\text{b}\bar{\text{i}}\text{r}}$  “fliegen (?)” [WUS], Hbr.  $\sqrt{\text{b}\bar{\text{i}}\text{r}}$   $\text{hifil}$  “sich emporschwingen (v. Habicht)” [GB] (NSem.: GB 7; DRS 5; WUS #33) < PAA \* $\sqrt{\text{b}\bar{\text{i}}\text{r}}$  “to fly” [GT]. The initial ECh. \* $\text{b}\bar{\text{i}}$ - issues regularly from the cluster of \* $\text{b}\bar{\text{a}}$ -. This PAA trilateral root was extended by \* $\text{b}\bar{\text{a}}$ - from a biliteral root, which is much more widespread, cp.:

<sup>44</sup> Perhaps a remote PAA variety (via rhotacism, so widespread in SAA) to the PAA etymon of Sem. \* $\text{b}\bar{\text{a}}\text{d}$ - “slave” and \* $\sqrt{\text{b}\bar{\text{a}}\text{d}}$  “to work” (denom.?) [OS] || CCh.: Hitkala  $\text{v}\bar{\text{a}}\text{d}\bar{\text{a}}$  “Sklave” [Lukas 1964: 109] etc.? Sem.-CCh.: HSED 232, #1029.

<sup>45</sup> E.g., it would be difficult to directly identify the above-listed Chadic forms displaying an old \* $\text{b}\bar{\text{a}}$ - with WCh.: Hausa  $\text{b}\bar{\text{a}}\text{r}\bar{\text{a}}$  “servant” [Abraham 1962: 77], which N. Skinner (1996: 16) related, along with an evident areal parallel like Mande  $\text{b}\bar{\text{a}}\text{r}\bar{\text{a}}$  “work, domestic service”, also to Eg.  $\text{b}\bar{\text{a}}\text{r}\bar{\text{a}}$  “Diener” (OK, Wb I 429-430). This latter theory is certainly untenable as it offers no explanation for the nature Eg. -k. On the other hand, strikingly similar forms are used in the Ethiopian area like Agaw: Qwara  $\text{b}\bar{\text{a}}\text{r}\bar{\text{a}}$  and Hamir  $\text{b}\bar{\text{a}}\text{r}\bar{\text{a}}$  “Knecht” [Reinisch 1885: 43] || LECu.: Somali-Jabarti  $\text{b}\bar{\text{a}}\text{r}\bar{\text{a}}$  “slave” [Reinisch 1904: 55] || ES: Gurage  $\text{b}\bar{\text{a}}\text{r}\bar{\text{a}}$ , Amhara  $\text{b}\bar{\text{a}}\text{r}\bar{\text{a}}$  “slave” (ES: Appleyard 1977: 53/95; Leslau 1979 III 157). But, as, for instance, W. Leslau (l.c.) and D. Appleyard (l.c.) have shown, the Ethio-Semitic term issues from the name of the ethnic group Barya, a people in NW Ethiopia speaking East Sudanic.

**160.1. PAA \*√br** “to jump, 2. fly, 3. flee” [GT] > ES \*√brr “to fly” (from Cu.?) [GT]: Geez barra “to fly, run fast” [Leslau], Amh. bārrärä “to fly, run away” [Leslau] (ES-Cu.: Leslau 1987: 107) and ES \*√bry “to flee” [GT]: Geez baraya “to bolt and flee (mount)” [Leslau], Amh. bāräyyä “to flee” [Leslau] = “s’enfuir, épouvanté” [DRS 82] (ES: Leslau 1987: 108) vs. MSA \*√brw: Jibbali ebré “to jump high and succeed, etc.”, Mehri hæbrō “i.a. to jump (from x to y)” (MSA: Johnstone 1981: 28; 1987: 54) || Bed. bir ~ bīr “to fly”, ambūr ~ anbūr “wing” [Reinisch 1895: 17, 21, 50] || NAgaw: Khamir bir- “fliegen” [Reinisch 1884: 349] | SAgaw: Awngi beräru “to fly” [Leslau] = bir- “to fly” [HCVA] = berer-əŋ “to fly” [HSED] || LECu.: Saho -ibrir- “to fly” [Sasse] | Oromo barar- “to fly” [Sasse, Lamberti] | HECu. \*barar- “to fly” [Hudson 1989: 406] = \*burr-/birr- [GT] (ECu.: Sasse 1982: 44; Cu.: LS 1997: 253-354) || WCh.: Hausa bíräärì “1. jumping, 2. surging forward to get at sg.”, cf. bürbürníyáá “gambolling with joy” [Abraham 1962: 102, 121] || CCh.: Musgu bárá “(s’en)-voler” [Mouchet 1950: 30], Vulum birì “voler (oiseau)” [Tourneux 1978a: 288; 1978b: 93] | Musgoy mbir “(s’en)voler” [Mouchet], Daba mbir “1. voler, 2. s’envoler, sauter” [Mouchet 1966: 136] = mb̄r “to jump” [Lienhard-Gieger], Kola ...mbír... “to jump” [Schubert] || ECh.: Mobu b́aré “sauter” & Ngam bré “voler (pour un oiseau)” [Jng. apud Lenssen 1984: 63] | EDangla b́éré “sauter (en dansant)” [Dbr.-Mnt. 1973: 42] = b́éré “(beim Tanzen) springen” [Ebobisse 1979: 127; 1987: 94], Bidiya ber “sauter” [AJ 1989: 58] | Mubi b́ír “voler (oiseau)” [Jng. 1990 MS: 5], Birgit b́erì “voler” [Jng. 1973 MS] (Ch.: JI 1994 II: 211). For the AA comparison see also Mukarovsky 1966: 19, #64; 1987: 226; SISAJa I #112; HCVA II #119; HSED #219 & #291; Takács 1999: 44.

**160.2. PAA \*√br** “to jump” [GT]: Sem.: MSA \*√brw [Johnstone]: Jibbali ebré “to jump high and succeed, etc.”, Mehri hæbrō “i.a. to jump (from x to y)” (MSA: Johnstone 1981: 28; 1987: 54) || (?) Eg. b3b3 “Verbum in Wortspiel mit der Körnerfrucht b3b3.t (statt des alten nb3b3)” (NK, Wb I 418, 13) = “to tremble, flutter (younger var. of PT nb3b3)” (Ward 1978: 28) = “sauter, tressauter (autre forme du nb3b3)” (AL 78.1228) = “\*zittern, sich hin und her bewegen, aufspringen” (GHWb 240) || WCh.: Hausa bíräärì “1. jumping, 2. surging forward to get at sg.”, cf. bürbürníyáá “gambolling with joy” [Abraham 1962: 102, 121] || CCh.: Daba mbir “1. voler, 2. s’envoler, sauter” [Mouchet 1966: 136] = mb̄r “to jump” [Lienhard & Giger], Kola ...mbír... “to jump” [Schubert] | Musgu bárá “to jump” [Mouchet] || ECh.: Mobu b́aré “sauter” [Jng. apud Lenssen 1984: 63] | DM \*ber- “to spring” [GT] > EDangla b́éré “sauter en dansant” [Dbr.-Mnt. 1973: 42] = b́éré “(beim Tanzen) springen” [Ebobisse 1979: 127; 1987: 94], Bidiya ber (berí, bereŋ) “1. apparaître (lune), 2. sauter”, pl. berèw (berèwí, berèweŋ) “sautiller, danser”, beréwò (f) “danse” [AJ 1989: 58] (Ch.: JI 1994 II 211). For these and further varieties with a voiceless Anlaut of this waste root family cf. EDE II 65 and 378-384, resp.

**161. Mubi b́irkí** (f), pl. b́iràayàk “gazelle cobe defassa (ar. nyalat)” [Jng. 1990 MS: 7] | DM \*ḅarg- “antilope” [GT]: Bidiya b́àrgà (f) “koudou, antilope rayée (ar. nyalat)” [AJ 1989: 62], Migama b́àrgú (m), b́àrgá (f), pl. b́àrgée “antilope-cheval (koudou)” [JA 1992: 73]: < ECh.

\*bVrK- < \*\*bVrK- “antelope” [GT] III Sem.: no certain cognates<sup>46</sup> III NBrb.: only etymologically unrelated look-alikes in Tamazight.<sup>47</sup>

**162. PMubi \*bəriyo** “leaf” [GT]: Mubi bəriyò (m), pl. bère “Blatt” [Lukas 1937: 180] = \*bəriyò “leaf” [Doornbos & Bender] = bəriyò (m), pl. bère “feuille (pl. papier monnaie)” [Jng. 1990 MS: 6], Minjile \*berrìo (sic: plain b-) “leaf” [Doornbos & Bender], Kajakse reflex obscure<sup>48</sup> (Mubi: Doornbos & Bender 1983: 77, #46). Its \*b- suggests a lost l/pharyngeal in the ancestral root (either AA \*√Hbr or \*√brH), whose reflex in some other AA branch has not yet been found though perhaps except for Semitic if we assume here both some metonymy between flora vs. fauna and a metathesis, cf. Sem. \*√ʿbr > Ar. √ʿbr: ʿabīr- “2. bien fourni (se dit, par ex., d’une flèche garnie de beaucoup de plumes, ou d’un mouton bien fourni de laine pour n’avoir pas été tondue pendant d’une année)”, mu-ʿbar- “1. bien fourni

<sup>46</sup> Ar. baraq-, pl. ʾabrāq-, bi/urqān- “1. béliet, 2. agneau” [BK I 114] = “a lamb (syn. of ḥamal-)” [Lane 190c], for which so far at least three different etymologies have been offered, is clearly out of the question in the context of this etymological entry as, in Arabic lexicography, it has been rendered, even ambiguously, either as not a genuine Arabic zoonym or as not a primary noun. Thus, both standard lexicons speak of a Persian loan (BK I.c.; Lane I.c. “a Persian word, arabicized, originally بَرّ”). As Iranist Prof. Kinga Paraskiewicz (Jagellonian University, Cracow) has confirmed for me (in her kind p.c. on the 21<sup>st</sup> and 22<sup>nd</sup> Sept. 2022), New Persian بَرّ barra and bara “1. a lamb, 2. the sign Aries; 3. a fawn” [Steingass 1892: 181] = barra بَرّ “1. lamb, ram; 2. (astr.) Aries” [MacKenzie 1971: 87] < Middle Persian warrag (Aramaic ideogram KNNa; Pahlavi script wkł / Manichaean script writing) < Proto-Iranian \*varn-aka-, where MPersian warrag became barrag at the beginning of the Classical Modern Persian period (9-11 cent. AD), after the Arabic conquest of Iran. Initial w- > b- was regular. The Arabs did not know the velar g so they pronounced it as uvular q or sometimes alveolar j (ḡ). New Persian final -a/-e stems < \*-ag. Henceforth, one might reconstruct the borrowing from the transgression of MPersian warrag > Class. Persian barrag into Ar. baraq. The direction of borrowing, beside the *lautgeschichtliche* arguments above, appears to be secured by the fact that the Arabic word has no cognates among the Semitic zoonyms, so no ancestral etymon can be assumed, whereas the Iranian stem originates from Proto-Indo-European \*urh<sub>1</sub>en- “ram”, whence also Sanskrit úraṇa-, Central Kurdish بێر berh, Northern Kurdish berh, Zazaki vereke, Ancient Greek ἀρήν (arēn) and Old Armenian quṇṇi ḡrñ derive (IEW I 1170). On the other hand of Arabic lexicography, however, DAFA 562 quotes solely Ar. √brq IV “sacrifier une brebis noire et blanche (to sacrifice a ewe with black and white fleece)” as a denominative root eventually derived from a certain √brq B carrying the “notion de base ’éclat (brilliance), opposition de deux ou plusieurs couleurs”. In addition, the Arabic term was affiliated in HSED 57 with an alleged WCh. \*barVḵ- (whose \*ḵ is certainly false as nothing reflects it in the one single reflex) > Bole barke “goat” || ECh. \*birVḵ- > Bidiya birki “bull” || SBrb.: Ahaggar a-bərkaw “calf” || Guanche a-baraki “cattle” < Brb. \*barak- (with an irregular \*-k-) < AA \*barak- “ram, goat, calf”. But there is hardly any support of \*-ḵ in this root, e.g., in East Chadic, we are certainly dealing with plain \*b- (and not an implosive \*b-) indicating a non-glottalized PAA \*-k, cf. DM \*bErk- “beef” [GT]: WDangla bərki (m) “bovidé mâle, boeuf, taureau” [Fédry 1971: 86], EDangla bėrkī (m), bėrkā (f), pl. bārkāy “1. le boeuf, le taureau. bovidé mâle (castré ou non), 2. la vache, la génisse (qui n’a pas encore porté): bovidé femelle, 3. les boeufs, les bovidés, les bêtes (en général)” [Dbr.-Mnt. 1973: 43], cf. also EDangla bīrkinnē (m) “le fumier, la bouse de vache sèche” [Dbr.-Mnt. 1973: 45], Bidiya bīrkī (m), bīrkā (f), pl. ḡāmāṅ “1. (m) tuareu, 2. (f) vache, 3. (pl.) troupeau, bétail” [AJ 1989: 58] | Ubi bōrgū “vache” [Alio 2004: 268, #44].

<sup>47</sup> Tamazight tu-berrey-t, var. tu-berreh-t, pl. tu-berryi “brebis à tête noire” [Taïfi 1991: 29; DRB 116: isolated in Brb.] vs. Tamazight tu-berqiy-t, pl. ti-berqiy-in “brebis à la tête rougeâtre”, in Izayan: “brebis dont les yeux, les oreilles et le museau sont tachetés de noir” [Taïfi 1991: 32; DRB 118: isolated in Brb.] being presumably just secondary zoonyms derived from a root variety akin to the almost homophonous Berber root for “black” (surveyed in EDE II 84-85 and EAAN I 58, #238). Cf. also Ar. √brq IV “sacrifier une brebis noire et blanche (to sacrifice a ewe with black and white fleece)” [DAFA 562].

<sup>48</sup> Cf. (???) Kajakse \*fiyayò “leaf” [Doornbos & Bender], whose cognacy seems at this moment *lautgeschichtlich* dubious.

de laine, de poil (mouton, chameau), spécialement. qui n'a pas été tondu pendant une année (mouton), 2. bien garni de plumes (se dit d'une flèche), 3. qui a presque atteint la puberté et qui n'est pas encore circoncis (jeune homme)", also 'ubr- "qui n'est tondu qu'après d'une année (mouton)" [BK II 154-155] and/or ES \*√br̥ > Geez bər̥ "reed (pen), branch of a chandelier, stalk, stem of fruit, stubble" [Leslau] = "calame, roseau à écrire, plume" [DRS], Tigre bər̥ "reed (pen)" [Leslau] = Tigre bər̥ and Tigrinya bər̥i "calame, roseau à écrire, plume" [DRS], Amharic bər ~ bə'ər "stubble, stalk of wheat, reed pen" [Leslau] = bərr "1. tige, 2. plume à écrire" [DRS] (ES: DRS 85, br̥3; Leslau 1987: 101-102). But the underlying original biradical root is better known:

**162.1. P<sup>2</sup>/SAA \*√br̥** "1. leaves, foliage, 2. (by extension) tree" [GT]: (???) Eg. b3.t (if its -3- < \*-r-)<sup>49</sup> "1. Busch, Gebüsch, 2. Büschel (d.h. mehrere Zweige oder Halme) verschiedener Pflanzen" (OK, Wb I 416, 5-10) = "1. bush, 2. wisp of corn" (FD 77) → Dem. b "Busch, Büschel" (DG 109) → Coptic (SLBF) ⲃⲱ, (A) ⲃⲟⲩ (f) "Baum" (KHW 20) III (?) NBrb. \*√br̥br̥ "to have (or be covered by?) leaves or foliage" [GT]<sup>50</sup> > Mzab bbərbər "couvrir entièrement avec une couverture, des feuilles" [Delheure 1984: 10] = bberber [DRB] | Qabyle bberb-er ~ bberber "2. être feuillu, avoir belle végétation", a-berbur "feuillage de courge" [Dallet 1982: 36] III NOM.: (???) Yemsa \*bur̥d̥-u "bush, forest" [GT]:<sup>51</sup> Yemsa bur̥du [Cerulli] = bur̥'ù [Lamberti] (Yemsa: Bender 2003: 338, #9) III WCh.: presumably Pero pūr̥ò [p < \*b poss.]<sup>52</sup> "tree", cf. pūr̥è "grass for roofing" [Frj. 1985: 48] || CCh.: Fali biri "Baum" [Lukas 1937: 110] | Masa baar "Baumwolle" [Lukas 1937: 98]. Cf. EDE II 17; EAAN I 47-48, #180.

**163. MT \*ḡale** "arrow" [GT]: Kofa ḡalé (f), pl. ḡalàn "arrow" [Jng. 1977 MS: 7, #138], Toram ḡele "flèche" [Alio 2004: 253, #74] | Bidiya ḡállà (f), pl. ḡalál "flèche", ḡalàlò ~ ḡalò

<sup>49</sup> Unless it reflects in fact \*bl̥t, for which cf. EDE II 16.

<sup>50</sup> It is, however, apparently rendered in Berber lexicography from a basic root sense "to be covered" (cf. DRB 91), whence its relatedness may only be conceived from a basic meaning \*"to be covered by foliage".

<sup>51</sup> Its connection to NOM.: Mocha dimbāro "bush, forest" [Leslau] (isolated in Kefoid: Bender 2003: 338, #9) is more than obscure. Alternatively and most likely, NOM.: Yemsa \*buḡ-u "bush, forest" [GT], provided its C<sub>2</sub> stemmed from an AA glottal affricate, may be equated with NBrb.: Shilh ta-buḡa "jonc de marais" | Qabyle ta-buḡa "jonc des marais" | Mzg. (Maroc Central) a-buḡa "esp. de roseau avec lequel on fait des cabanes et des treillis" (NBrb.: DRB 29, bḡ15) III Sem. \*√bwḡ: esp. Ar. būḡ- (coll.) "roseaux" [DRS] = "tiges sèches du maïs, dont on fait des grillages pour les balcons et les jardins" [BK I 178] = (coll.) "1. roseau(x) (d'Égypte dont on fait des calames, des claies, etc.) / (Egyptian) reeds (gen., from which pens, hurdles etc. are made), 2. inflorescence (d'une plante herbacée?), 3. B: pousse, cœur d'une touffe de sparte / shoot, heart of a tuft of esparto grass, 4. LPM: inflorescence de l'alfa / inflorescence of alfa-grass" [DAFA 916] < PAA \*buḡ/ḡ- "reed thicket (?) [GT].

<sup>52</sup> For the occasional correspondence of Pero p- < AA \*b-, cf. Pero pūr̥um "knee" [Frj. 1985: 48] < AA \*√br̥ "knee" [GT]. Or cf. Pero pāra "hunt (n.)" [Frj. 1985: 44] and Tangale para "hunt(ing)" [Jng. 1991: 129] = pār- "1. to look for, 2. hunt" [Kidda 1985: 218, #75] identical with WCh.: Hausa fārāw-tà "to hunt (an animal)" [Abraham 1962: 253] | Bokkos faar "1. suchen, 2. jagen" [Jng.], Daffo-Butura faar "jagen" [Jng.] (Ron: Jng. 1966: 172; 1970: 141) || ECh.: Mubi fāràngàtè "to hunt" [Jng.] (Ch.: JI 1994 II 198-199) vs. Dem. jr br̥r "jagen" (DG 119: 3) III SAgaw: Awngi barabar- "to search" [Hetzron (?) in Ehret 1997 MS: 26, #1121] || LECu.: Boni búr-e? "fort-jagen" [Heine 1977: 287] III WCh.: Gwandara bira "2. to look for" [Matsushita 1972: 26] | Bole bàrà "hunting" [Ibrizimow & Gimba 1994: 128], Kwami bàrà "Jagd" [Leger 1993: 170] | Ngizim bárá "hunting", bàrù "to hunt" [Schuh 1981: 21-22] || CCh.: Chibak bàrà "1. suchen, 2. jagen, 3. wollen" [Hoffmann 1955: 133]. Cf. further EDE II 264.

(m), pl. ɓaale ~ ɓalè “arc” [AJ 1989: 61] | Sarwa ɓálāw, Gadang ɓālū “lance (de guerre)” (Somray gr.: II 1993 MS: 8, #144). The history of ECh. \*ɓal- “1. arrow, 2. lance” [GT] underlying these forms has not yet been comprehensively mapped in all its details: this is what an attempt is made for below. Note that, in principle, Ch. \*ɓ is regular < a combination of \*ʕ/\*h/\*ʔ/\*h + \*b as radicals or, alternatively, may also derive from a prenasalized \*mb-.

**163.1.** The Chadic word exists with a C<sub>2</sub> \*-r also, which may either be due to a reason lying in the historical phonology (not yet cleared) or cf. CCh.: Munjuk-Puss ɓre (m) “pointe de flèche” [Tourneux 1991: 79] | Masa \*ɓaraw ~ \*ɓur “arrow-bow” [GT]: Masa-Bongor ɓàràw-ná “arc + carquois + flèche” [Jng. 1971/2 MS: 81], Gizey/Wina gú ɓur, Masa ɓàràw, Ham ɓòròd, Musey gúmbùrà “arc” [Ajello et al. 2001: 6], cf. Gizey/Wina zìy ɓur, Masa zì ɓàràw, Ham zì ɓòròd “carquois” (lit. “house of arrow”, cf. PMasa \*ziy “house”) [Ajello et al. 2001: 11], Gizey/Wina ɓur “flèche” [Ajello et al. 2001: 26].

**163.2.** A deverbal origin of the above term for “arrow” is possible, cf. WCh.: Hausa ɓíllà “to throw” [Stolbova 1996: 27] | Ron \*ɓol “schießen” [GT]: Fyer ɓol, Bokkos ɓol, Daffo-Butura ɓol (Ron: Jng. 1968: 12, #143; 1970: 392) || CCh.: Daba ɓàl “to throw (an arrow)” [Barreteau 1995: 225].

**163.3.** O. V. Stolbova (1996: 27) preferred equating this Chadic verbal root (presented right above sub #80.2.) with some reflexes of WCh. \*√mbɩ “to throw (a weapon like arrow)” [GT], cf. WCh.: Kulere ɓil “werfen (Stock usw.), bewerfen” [Jng. 1970: 351] = “to throw” [Newman 1977: 186] | Bole ɓumɓul “wegschleudern” [Lukas 1971: 133] || CCh.: Zelgwa mbál “to throw an arrow” [Brt. 1995: 202]. V. Orel and O. Stolbova (1990: 80, #51) rightly compared Bole ɓumɓul with Ar. nabala “jeter, lancer des traits, des dards”, nabl-at- “une flèche” [BK II 1187-8].

**163.4.** Elsewhere, V. Orel & O. Stolbova (HSED #1768) combined Bole ɓumɓul less convincingly with Ar. miʕbal-at- and Eg. mʕb3 (a well-known isogloss, see below)<sup>53</sup> < AA \*mi-ʕVbal- “arrow, spear”, which is untenable in this direct way, since Ch. \*mb- cannot be immediately equated with Eg.-Sem. \*√ʕb, cf. Eg. mʕb3 “Art Speer” (PT, Wb II 47, 1-3, cf. RdE 15, 1963, 60, n. 1) = “harpoon” (FD 105) = “lance, spear, also harpoon” (Camino 1972: 219, cf. WD I 85) = “Harpune, (Fisch)Speer” (GHWb 327; ÄWb I 516) || CSem.: Ar. miʕbal-at- “a broad and long arrow-head or an iron (iron-head) made broad, an arrow having a broad head” [Lane 1942] = “1. fer de flèche long et large, 2. flèche au fer long et large” [BK II 159] = miʕbal-at- “a kind of arrow” [Ember after Nöldeke 1910: 55] = miʕbal-at- “arrow with a thick head” [Albright 1919: 179, #11] = miʕbal-at- “large arrow point” vs. miʕbal- “cutting tool” [Fronzaroli 1977: 164] = miʕbal-at- “arrow” [Vycichl in DELC 108] = “arrowhead” [Leslau] || ES: Geez maʕbal “sharp instrument, arrow” [Ember] = mabʕal ~ mâ(ʕ)bal “instrument, utensil, weapon” [Albright 1919: 179, #11] = maʕbal ~ mabʕal “trait, javelot” [Cohen] = māʕbal “telum, jaculum” [Vycichl] = maʕbāl “arrow” [Fronzaroli 1977: 164] = māʕbal ~ māʕəbalt “1. tool, instrument, fittings, 2. arrow, weapon, spear” [Leslau 1987: 54]. The Egypto-Semitic stem \*mV-ʕbVl- was apparently a *nomen instrumenti* formation (cf. Grapow 1914: 23), but the basic meaning of the underlying Eg.-Sem. \*√ʕbɩ is obscure in both

<sup>53</sup> Literature for this Eg.-Sem. match: Ember 1926: 5, #1; 1930 = ESS, §3.c.3, §5.a.19; Vycichl 1934: 55; 1958: 372; 1983 = DELC, 108; Calice 1936 = GÄSW, #623; Cohen 1947: #57; HSED #1768.

branches (no trace in Egyptian and highly disputed speculative hypotheses in Semitic),<sup>54</sup> or, at least, such an expectable verbal root does not appear in the logically expectable form, such as a nowhere attested NAA  $^{**}\sqrt{\text{C}}\text{bl}$  “to shoot” (or sim.) [GT], which is itself a revealing circumstance suggesting that pre-Eg.-Sem.  $^{*}\text{mV-}^{\text{C}}\text{bVI-}$  had already been in use as a ready-made (pre-Neolithic, early PAA?) technical term by the time of a secondary Egypto-Semitic cohabitation the Nile valley Neolithic period (5<sup>th</sup>-4<sup>th</sup> mill. BC) when the original verbal root in both branches was no longer in use or, at least, was not the most frequented synonymous variety in both branches. Highly suspicious in this context is the trace of a possible PAA  $^{*}\sqrt{\text{C}}\text{bl}$ , instead of NAA (where both Semitic and Egyptian belong) in SAA, namely CCh.: Munjuk-Puss *ḥili* (*ḥəla*) “1. percer, 2. enfoncer (une pointe)” [Tourneux 1991: 79].

**163.5.** Moreover, the weapon name can be pointed out, again from Chadic, in its simplest biradical root form (i.e., void of either C<sub>1</sub>-  $^{*}\text{C-}$  or prenasalization) also, cf. Ch.  $^{*}\sqrt{\text{bl}}$  “to throw a weapon” [GT]<sup>55</sup> Note that these Chadic cognates are to be distinguished from Ch.  $^{*}\text{ḥal-}$  “(to shoot an) arrow” [Stolbova] (discussed above), which Stolbova (CLD I 35) erroneously equated with Ar. *nabala*.

**164. Mubi ḥəldīk** (m) “fouet” [Jng. 1990 MS: 6]: puzzling for the time being. At any rate, we may in principle safely reckon with a transposition of glottalization in this case also, i.e.,

<sup>54</sup> Most suggestive is Ar.  $^{\text{C}}\text{abala}$  “to cut (off) to extirpate it” or  $^{\text{C}}\text{abula}$  “to be(come) large, big, bulky, thick” [Lane 1941]. Already Th. Nöldeke (1910: 55) separated Geez  $\text{mā}^{\text{C}}\text{əbal}$  “arrow” from Geez  $\text{mab}^{\text{C}}\text{al}$  “instrument”. Following him, A. Ember (1926: 5, #1) treated Ar.  $\text{mi}^{\text{C}}\text{bal-at-}$  “a kind of arrow” as a borrowing from Geez  $\text{mā}^{\text{C}}\text{əbal}$  “arrow”. W. F. Albright (1919: 179, #11), followed later by W. Leslau (1987: 84), combined the Geez and Ar. noun with Akk. (nA, jB) *bēlu* “etwa: Waffe” [AHW 120], which is uncertain. Following Dillmann, Albright derived Ar.  $\text{mi}^{\text{C}}\text{bal-at-}$  “arrow with a thick head” from  $^{\text{C}}\text{abila}$  “to be thick”. P. Fronzaroli (1977: 160-4), in turn, saw the source of Geez  $\text{ma}^{\text{C}}\text{bāl}$  “arrow” and Ar.  $\text{mi}^{\text{C}}\text{bal-}$  “cutting tool”,  $\text{mi}^{\text{C}}\text{bal-at-}$  “large arrow point” in Sem.  $^{*}\sqrt{\text{C}}\text{bl} >$  Ar.  $^{\text{C}}\text{abala}$  “to cut”,  $^{\text{C}}\text{ablā?}$  “white rock, narrow strip in the blackness of the earth, the stones of which are white”,  $^{\text{C}}\text{a}^{\text{C}}\text{bal-}$  “white stone or mountain of which the stones are white” [Fronzaroli], Dathina  $^{\text{C}}\text{ibāl}$  (pl.) “heaps of corn” [Fronzaroli] || MSA: Soqotri pl.  $^{\text{C}}\text{əbhalēten}$  “sharp stones”, cf.  $\text{mā}^{\text{C}}\text{bher}$  “rock” [Leslau 1938: 293, 296], Mehri  $^{\text{C}}\text{aybēl}$  [Fronzaroli] =  $^{\text{C}}\text{āybəl}$  “flint(stone)” [Johnstone 1987: 10] | Geez  $^{\text{C}}\text{ubāl}$  “hill” [Leslau 1987: 54]. Fronzaroli set up two P-Semitic etymons, namely  $^{*}\text{Cabl-at-}$  “a white stone” vs.  $^{*}\text{Cibal-}$  “white stones” (supposed source of the name of Ebla), both carrying the basic meaning “a rock of clear, shining appearance similar to flint but coarse-grained, prob. a variety of granite”. In Fronzaroli’s view, the occasional use of this rock as flintstone explains the Mehri and Soqotri data, while the Ar. reflexes suggest the stone  $^{*}\text{Cabl-}$  was used for making baldes and points. Ar.  $^{\text{C}}\text{abala}$  I “10. garnir une flèche d’un fer long et large” [BK II 158]. The authors of SISAJa I #96, the Diakonoff team (1981) considered Geez  $\text{ma}^{\text{C}}\text{bal}$  to be the metathesis of Geez  $\text{mab}^{\text{C}}\text{al}$  (lit. “working tool”) explained from Sem.  $^{*}\sqrt{\text{p}}\text{C}^{\text{I}} \sim ^{*}\sqrt{\text{b}}\text{C}^{\text{I}}$  “make, do”. W. Leslau (1987: 54, 84) assumed in Geez the following scenarios: (1) Geez  $\text{mā}^{\text{C}}\text{əbal(t)}$  derives directly from Geez  $\sqrt{\text{C}}\text{bl}$  II  $^{\text{C}}\text{abbala}$  “to make, do” (which Leslau linked to Sem.  $^{*}\text{Cml}$  “to work”). (2) Geez  $\text{mā}^{\text{C}}\text{əbal(t)}$  is met. of Geez  $\text{mab}^{\text{C}}\text{al} \sim \text{mab}^{\text{C}}\text{əl}$  “iron tool, axe”, cognate with Ug.  $\sqrt{\text{b}}\text{C}^{\text{I}}$  “to make, manufacture, work” [DUL 203] || EOSA  $\sqrt{\text{b}}\text{C}^{\text{I}}$  “to work, excavate bedrock (travailler, creuser le sousbassement rocheux)” [SD 26].

<sup>55</sup> The underlying verbal root has become known from Chadic, cf. WCh.: Kupto *bùuléy* “werfen, schleudern” [Leger 1992: 18], Geruma *bèl-áalà* “to throw” [Schuh 1978: 118] || CCh.: Glavda *bal* “to throw, cast” [Rapp & Benzing 1968: 13] | Mada *bál* “to shoot” [Rossing 1978: 324, #635] | Puss *bili* “lancer, jeter (une seule chose)” [Tourneux 1991: 79], perhaps Mbara *vlà* [*vl- < \*bl-?*] “jeter”, *vùl* “lancer, jeter” [TSL 1986: 280]. Accordingly, with no surprise, the nominal derivative is equally only attested in WCh.: Tangale *bal* “spear with a long blade” [Jng. 1991: 70] || CCh.: Masa  $^{*}\text{bir} </\sim/ > ^{*}\text{bil}$  “couteau de jet” [GT]: Masa *bīl* “couteau de jet” [Caitucoli 1983: 38] Masa *bīl* [*bīlīlā*] “1. le couteau de jet, 2. le courant du fleuve (métaph.)” [Caitucoli 1983: 50], Masa-Bongor *bīl-là* “couteau de jet” [Jng. 1971/2 MS: 81], Lame *bàrà* “couteau de jet” [Sachnne 1982: 283], Zime-Dari *pàrà* “couteau de jet” [Cooper 1984: 21].

ḥeldík < Ch./AA \*bVlṭ/ç/č/çVK. If it was a compound, as it looks like to be, for the first component cf. WCh.: Hausa búúlálà “hippo-hide whip” [Abraham 1962: 117] || ECh.: (???) Nancere buul “Besen” [Lukas 1937: 89]? But as for the second one, hard to make even guesses.

**165. Jegoid \*ḥElkU** “crocodile” [GT]: Jegu ḥl̀kò, pl. ḥl̀k “Krokodil”, ḥl̀ké “weibl. Krokodil” [Jng. 1961: 111] = ḥl̀kó [Jng. apud JI 1994 II 95: isolated in Ch.], Kofa ḥl̀kó (m), pl. ḥl̀kán “crocodile” [Jng. 1977 MS: 12, #295] || WCh.: Kofyar ḥálák [reg. < \*balak] “hunger” [Netting 1967: 2; Takács 2004: 26; isolated in AS] || Sem. \*√blk “1. to be eager (?), 2. greedily devour (?)” [GT]: perhaps attested from the cognacy of Hbr. √blq qal “verwüsten” [GB 102] = “dévaster, ravager” [DRS 69, BLQ1] = “to lay waste (the land)” [KB 135]<sup>56</sup> | Syrian b‘laq “désirer” [DRS 69, BLQ4] and Mandaic baliqa “greedy” < √blq “1. to swallow up, devour, 2. be greedy” [Drower-Macuch 1963: 48, 66] = baliqa “glouton, cupide” [DRS 69, BLQ2: isolated]<sup>57</sup> | Ar. balaqa I “1. emporter, enlever (les pierres, se dit d’un torrent)” [BK I 163]<sup>58</sup> (Sem.: DRS) < PAA \*√blk “1. to be greedy, 2. devour, spoil” [GT].<sup>59</sup> The semantic connection of “greedy” and “crocodile” is attested in Ancient Egyptian.<sup>60</sup>

<sup>56</sup> Usually kept in Semitic lexicography (GB, DRS, KB) apart from the Mandaic root and better affiliated with the diverse homophonous Arabian roots whose sense are ranging as far as “to open” and “close (doors)”, which is semantically difficult to follow.

<sup>57</sup> Treated in DM l.c. or DRS l.c. as a modified form of Sem. \*√bl’ > Mandaic √bla “to swallow up, devour”, although the latter root did not result in the sense “greedy”, cf. only Mandaic bla(ia)ia “swallowers, consumers” [Drower-Macuch], but also NSyriac \*(m)banqil “avalier, s’enivrer” [DRS 72]. One wonders if the Mandaic-Kofyar parallel with a C<sub>3</sub> = AA \*√k is due to pure chance or inheritance.

<sup>58</sup> It would be perhaps thinkable to affiliate here Ar. balaqa I “5. violer, forcer une fille” [BK I 163] = baliqa and baluqa “2. he devirgated or deflowered a girl” [Lane col. 253a] = balaqa I “violier (une fille)” [DRS 69, BLQ1] also to be explained from \*\*to greedily devour”, but in Arabic lexicography, it has traditionally been rendered from the primary sense of stem I and IV “3. ouvrir brusquement la porte ou l’ouvrir tout entier” [BK I 163] = I “1. he opened a door wholly or vehemently” [Lane col. 253a] = IV “ouvrir/fermer (brusquement une porte)” [DRS 69, BLQ1].

<sup>59</sup> The third radical of PAA \*√blk must have been an ancient (PAA) root extension, cf. SAA \*√bl “2. greed, avarice” [GT]: LECu.: Somali béll-o “Habgier, Egoismus” [Reinisch 1902: 83] || CCh.: Hitkala(nchi) (Hide) mbulj “avare” [Eguchi 1971: 219]. The same root may have been extended by a C<sub>3</sub> \*-m in PAA (???) \*√blm “1. to feel lust, 2. be greedy” (?) [GT] > Sem.: Ar. balama “être en chaleur (se dit d’une chamelle)”, balam- “penchant sexuel violent chez une chamelle, et enflamment des parties sexuelles” [BK I 164] = balama “être en rut (chamelle) / to be in heat (she-camel)”, balam-(at)- “tumescence vulvaire (de la chamelle, lors du rut)”, mu-blim- “(chamelle) en rut, non encore saillie / (she-camel) in heat, not yet covered” [DAFA 831] || presumably Eg. bnw.t “von geilen Tieren, die sich vor dem Coitus beriechen” (OK, Wb I 459, 2) = bnw.tj “lubrique” (AL 78.1324) = bnw.t “\*Brunft” (GHWb 253), whose root may be conceived as a result of a dissimilation of two incompatible labials (i.e., \*√blm > \*√blw???) || CCh.: (???) Musgu búlemi (Rohlf’s), búlimi (f), pl. búlamai (Krause) “unverheiratet” [Lukas 1941: 48] || ECh.: Mokilko búlmè “le fait d’être insatiable, avidité” [Jng. 1990: 69]. Note that in DRS 68, BLM1, Ar. ʿablamu “qui a les lèvres enflées”, balam-at- “tumescence vulvaire (de la chamelle en rut)”, whence Ar. balama “être en rut” was apparently treated just as a secondary denominative derivation, was affiliated with unrelated roots stemming from the basic sense “lier”. Ultimately akin to LECu.: Oromo bel-a “1. fame, 2. miseria, scarsità, carestia”, belauu “1. aver fame, appetito, essere affamato, 2. essere ridotto nella miseria” [da Thiene 1939: 38] = bēl-a “hunger, famine”, bēlaʷa “to be/go hungry” [Gragg 1982: 44]: < AA \*√bl “3. hunger” [GT] vs. AA \*√bl “1. desire, lust” (above)? Does this bunch of roots ultimately derive from N/P?? AA \*√bl “1. desire, lust” [GT] forming a widespread AA family? Cf. EAA I 65-66, #276, #277, #278.

<sup>60</sup> Cf. LEG. ʿf ~ ʿfʿf “Bez. des Krokodils” (GR, Wb I 182, 13) = ʿfʿ “crocodile (the “greedy one”, perhaps because of its appetite in catching fish or carrion meat)” (PL 152) vs. ʿfj “gierig (?)”, vgl. das ältere 3fʿ (NE, Wb

**165.1.** Moreover, the pass. sense \*‘to be spoilt’ of the same (?) root may have resulted in PAA \* $\sqrt{\text{blk}}$  ‘3. wrong, 4. worn-out, 5. devastated’ [GT],<sup>61</sup> which may have once, clearly in PAA, been eventually developed from the preceding root by an extension of the semantical spectrum.

**166. Kujarke** \* $\sqrt{\text{b}^{\text{w}}\text{a}}$  ‘dog’ [Doornbos & Bender 1983: 76, #19] ||l NOm. \* $\sqrt{\text{bw}}$  ‘wild feline (?)’ [GT]: NWOmeto \*baw- ‘cat’ [Bender 2003: 76, #12]: i.a. Basketo bawa ‘wild cat’ [Fleming/Cerulli in Bender 2003: 325, #12], Malé ba’wo ‘cat’ [Siebert in Bender 2003: 325, #12] | Janjero (Yemsa) biw-à ‘Schakal’ [Lamberti 1993b: 334] | Sheko boā ‘hyena’ [Fleming] (isolated in Dizoid: Bender 2003: 349, #48) || SOM.: Ari (Galila of Fleming) bawa ‘cat’ [Bender & Tully apud Bender 2003: 347, #12: isolated in Aroid] ||l SCu. \* $\sqrt{\text{b}^{\text{w}}\text{ah}}$ - ‘hyena or jackal’ [GT]: WRift \*bah-ā, pl. \*bah-u ‘hyena’ [KM]:<sup>62</sup> Iraqw baha, pl. bahu, Alagwa baha, pl. bahu, Burunge baymo [< \*bah-im-o], pl. bawu [< \*bahu] (WRift: KM 2004: 68) | Asa bō-k (masc. n. suffix -k) ‘hyena’ [Ehret] | Dahalo b̥wéha [b- < SCu. \*b-] ‘jackal’ [Maddieson quoted by Blažek]<sup>63</sup> (SCu.: Ehret 1980a: 136, §I.A.24) ||l CCh.: Chibak bou’a ~ b̥uhá ‘Schakal’ [Hoffmann 1955: 123] < SAA \* $\sqrt{\text{bwh}}$  (stem pattern \*bawh-?) ‘wild feline (jackal?) sp.’ [GT].

**166.1.** Hard to decide<sup>64</sup> whether this root is ultimately connected to an apparently different, though almost homophonous and synonymous one, present in Ethio-Semitic (borrowed from

I 182, 12) = ʿfʿ ‘greedy’ (NK, PL 152) < 3fʿ ‘gierig, gefräßig’ (Lit. MK, NE, Wb I 9, 17) = ‘glutton(y)’ (Lit. MK, FD 3) vs. ʿf3 ‘to devour (?)’ (CT I 30, FD 42).

<sup>61</sup> Cf. Sem.: Ar. ba/ulūq-at- and ballūq- ‘1. désert, plaine vaste et stérile’ [BK I 163], cf. also Ar. balqa’a Q.I ‘it (a country or region) was or became vacant, void, destitute of herbage or pasturage and of human beings’, Q.III ʔiblanqa’a ‘it (sorrow, grief or anxiety) became removed or cleared away’, balqa’a- ‘1. a land that is vacant or void, destitute of herbage or pasturage and of human beings in which is nothing, vacant or void place (of alighting or abiding), 2. a woman devoid of every good quality’ [Lane col. 253b-c] = balqa’a I ‘être inculte et inhabité (se dit d’un pays)’, balqa’a- and balqa’a-at- ‘1. pays inculte, inhabité, 2. femme mauvaise, sans aucune qualité ni vertu’ [BK I 163-164] = balqa’a- ‘1. pays aride, désertique, désert vide, 2. (méton.) (femme) dénuée de qualités, (woman) bereft of all good qualities, 3. (adj.) désertique’, balqa’a ‘être balanqa’a- “totalement désert (lieu, piste), utterly deserted (place, track)” [DAFA 822b-823a] ||l NBrb.: perhaps Qabyle a-ballaq ‘1. méchant, 2. tête’, ta-ballaq-t ‘mauvaise affaire, difficulté’ [Dallet 1982: 25; DRB 65, bly/q9-10: isolated in Brb.] ||l CCh.: Munjuk-Puss ʔilki (ʔəlka) ‘abîmer’ [Tourneux 1991: 79] | PMasa ʔalak ‘to become worn-out’ [GT]: Masa ʔalak ‘(tr. ou intr.) 1. user ou 2. s’user’, [ʔülākʔā] (composé?) ‘le fait d’user ou de s’user’ [Cañtucoli 1983: 54], Gizey/Wina, Ham, Musey ʔálák, Masa ʔúlák, Marba ʔlák ‘abîmer’ [Ajello et al. 2001: 1], Gizey/Wina ʔálák, Masa ʔúlák, Ham ʔálák, Musey ʔálák, Lew ʔlák, Marba ʔlák ‘détériorer’ [Ajello et al. 2001: 20].

<sup>62</sup> Affiliated by R. Kießling and M. Mous (l.c.) with ECu. \*bahal- ‘wild animal’ [Sasse] and Tanzanian Bantu of zone G \*bau ~ \*bagu ‘hyena’ [Bastin] remarking that ‘the presence of a velar plosive in abovious cognates of other zones, e.g. *mbagu* ‘big hyena’ in Nyamwezi, seem to run counter against Ehret’s 1974 hypothesis of a straightforward transfer from a Southern Cushitic source into Bantu.”

<sup>63</sup> This Dahalo reflexes was ignored by Ch. Ehret (1980: 136, §I.A.24) and R. Kießling and M. Mous (l.c.). The equation with Dahalo ʔáhōma ‘female hippopotamus’ derived by Ehret from an alleged SCu. \*bah- ‘large wild animal’ in this entry is certainly out of the question, since this word belongs to an entirely different etymon, cf. Sem.: Hbr. bəhēmā ‘Vieh’ and Ar. bahīm-at- ‘Kleinvieh’ [GB 86 with a Semitological *Volksetymologie*].

<sup>64</sup> Some authors combined some of the reflexes of both AA roots, distinguished in this paper, under one common supposed etymon (Bed.-SCu.: Fleming 1969: 28; Bed.-Dasanech-Dahalo-SCu.: Blažek 2003: 241-242). Even today, V. Blažek (p.c., July 2022) views that some of the Chadic *comparanda*, listed in this paper also,

a Cushitic substrate?): Tigre bāyhot, pl. bāyhi ‘a species of jackal’ [LH 1956: 294] || Bed. bāyho ‘Schakal, Fuchs, *Canis vulpes Nilotica*’ [Reinisch 1895: 54] || LECu.: Dasenech bāy-c (m), pl. bāy-à ‘jackal’ [Tosco 2001: 486] || Eg.: uncertain reflex<sup>65</sup> || WCh.: Goemay mbai’ [mbai] ‘domestic cat’ [Sirlinger 1937: 136; Takács 2004: 12: isolated in AS] | Tangale bai ‘dog’ [Kidda 1985: 201, #32] < SAA \*√byh (stem \*bayh-?) ‘wild feline (jackal?) sp.’ [GT].

**167. MT \*baw-** ‘to go’ [GT]: Mubi bau ‘gehen, laufen’ [Lukas 1937: 180] = bów (bâ, nžáà) ‘partir, aller, se promener’ [Jng. 1990 MS: 7], cf. also Mubi ba ‘gehen’ [Lukas 1937: 180], Masmaje bo ‘aller’ [Alio 2004: 280, #34] | WDangla bāàwè ‘aller (jamais dans le sens de venir /àsè/)’ [Fédry 1971: 104], Mawa (close to Dangla) bəŋ (bê, ba) ‘gehen (aller), weggehen (partir)’ [Jng. 1978 MS: 2; 1980 MS: 28] | Sokoro bëy ‘to go’ [Saxon in JI 1994 II 163] || CCh.: Tera bá ‘to come’ [Newman 1964: 47] < PCh. \*bV “идти, уходить” [Dlg.] = \*b- ‘to go’ [NM] = \*b<sub>2</sub>- ‘to come, go (out)’ [JI 1994 I: 78] || Om. \*bV ‘gehen’ [Sasse] > COMeto \*b- and EOMeto \*ba(y) ‘to go’ [Fleming] extended Wolayta cluster \*b- (mono-consonantal) ‘to go, walk’ [Bender 2003: 17, #59] | SEOMeto \*ba [Bender 2003: 117, #59] > Kachama bā ‘to go, walk’ [CR in Bender 2003: 87, #59] || ECu. \*baḥ- ‘to go out’ [Sasse] > LECu. \*baḥ- [Black 1974: 174, 202] (ECu.: Sasse 1982: 30-31; Dlg. 1973: 318) || SCu.: Ma’a būhē ‘gehen’ [Meinhof 1906: 308] = bu? ~ buh ‘to go’ [Fleming] = -buhe ~ -bu ‘to go’ [Ehret 1980: 139, #50]. The Mubi root was equated with the Ometo reflex already by M.L. Bender (1975: 165) who was pondering a cognacy with ECu. \*baḥ- ‘to go out’ and/or Sem. \*√bw? ‘1. to enter, 2. return’ [GT] too. See also Greenberg 1955: 56; Fleming 1969: 25; 1974: 89; Dlg 1973: 318; Sasse 1981: 152, #4; SISAJa I #129; JI 1994 I 38; HSED #157; HCVA II #143; Voigt 1998: 609-610; Bender 2003: 117, #59.

**167.1. Is P<sup>2</sup>AA \*√bwh** ‘to appear’ [GT] identical with the preceding root? Cf. Sem.: Ar. √bwh I: bāḥa ‘1. paraître, apparaître, être mis au grand jour, 2. être en public, 3. communiquer un secret, déclarer qqch. à qqn.’ [BK I 176] = ‘to be revealed, become public’ [Leslau] || ES: Geez √bwh: boḥa ‘to be seen, revealed, clear’ [Leslau] (Sem.: Leslau 1987: 115) || (?) LEg. bḥ [unless \*b3ḥ and if -ḥ < \*-ḥ] ‘1. aufgehen (von der Sonne), 2. hell glänzen (von der Milch)’ (LP, GR, Wb I 423, 1-2) || CCh.: Logone bo ‘hervorschießen, aufwachsen’ [Nct. in Lukas 1936: 87]. Cf. EDE II 291; EAAN I 71, #315.

\*

can also belong to this unified ‘jackal’ etymon (irrespective of the medial \*-w- vs. \*-y- in their roots and the apparently different C<sub>3</sub> laryngeal/pharyngeal, resp.) and not to the N<sub>Om</sub>. word stem for ‘cat’.

<sup>65</sup> As suggested in EDE II 147 (among some other alternatives), Eg. bjhs ‘ein Raubtier (nur als PN)’ (NE, GHWb 248, not in Wb I 444 and PN I 93b), whose determinative appears to depict a smaller animal with four feet, longer tail resembling a fox (or sim.), may perhaps be akin to the Bedawye and Tangale terms.

## Special symbols

P: any labial stop (f, p, b, ɸ), T: unspecified dental stop (t, d, ɖ), S: any voiceless sibilant and/or affricate (s, ʃ, š, c, č, ɕ), Z: unspecified voiced sibilant and/or affricate (z, ʒ, ʝ), K: any velar stop (k, g, ɣ), Q: unspecified uvular or postvelar etc. (q, ɢ, ʁ, ʕ), H: any of the pharyngeals or laryngeals etc. (ʕ, ʁ, ʕ, h, ʔ). The vertical strokes signify the degree of closeness of the language groups (e.g. Kotoko | Masa), subbranches (e.g. North Berber || East Berber), and branches (Semitic ||| Egyptian), from which the individual lexical data are quoted.

## Abbreviations of languages and other terms

(A): Ahmimic, (A<sub>2</sub>) = (L): sub-Ahmimic = Lycopolitan dialect, aA: Old Assyrian (altassyrisch), aAk: Old Akkadian (altakkadisch), AA: Afro-Asiatic (Afrasian, Semito-Hamitic), Akk.: Akkadian, Amh.: Amharic, Ar.: Arabic, Aram.: Aramaic, AS: Angas-Sura, Ass.: Assyrian, (B) Bohairic, b/Bab.: Babylonian, BAram.: Biblical Aramaic, Bed.: Bed'awye (Beja), Brb.: Berber (Libyo-Guanche), BT: Bole-Tangale, C: Central, CAA: Common Afro-Asiatic, Ch.: Chadic, Cpt.: Coptic, CT: Coffin Texts, Cu.: Cushitic, Dem.: Demotic, DM: Dangla-Migama, E: East, Eg.: Egyptian, ES: Ethio-Semitic, Eth.: Ethiopian, Eth.-Sem.: Ethio-Semitic, (F): Fayyumic, GR: Ptolemaic and Roman period, H: Highland (in Cushitic), Hbr.: Hebrew, jB: younger Babylonian (jungbabylonisch), L: Late, L: Low(land), (L) = (A<sub>2</sub>): Lycopolitan dialect = sub-Ahmimic, lit.: literature, LP: Late Period, M: Middle, Mag.: magical texts, Med.: medical texts, MK: Middle Kingdom, MSA: Modern South Arabian, MT: Mubi-Toram, N: New, N: North, nA: Neo-Assyrian, NE (or NEg.): New Egyptian, NK: New Kingdom, Nslm.: Taneslem, O: Old, OK: Old Kingdom, Om.: Omotic, OSA: Old South Arabian, OT: Old Testament, P: Proto-, PB: Post-Biblical, PT: Pyramid Texts, reg.: regular, S: South, (S): Sahidic, Sem.: Semitic, Syr.: Syriac, Ug.: Ugaritic, W: West, Wlmd.: Tawllemet.

## Abbreviations of author names

Abr.: Abraham, AJ: Alio & Jungraithmayr, Alm.: Alemayehu, Apl.: Appleyard, BK: Bieberstein & Kazimirski, Brt.: Barreteau, CR: Conti Rossini, Dbr.: Djibrine, Dkl.: Diyakal, Dlg.: Dolgopolsky, DM: Djibrine & Montgolfier, Frj.: Frajzyngier, Ftp.: Fitzpatrick, GB: Gesenius & Buhl, GT: Takács, IL: Institute of Linguistics, IS: Illič-Svityč, JA: Jungraithmayr & Adams, JI: Jungraithmayr & Ibriszimow, Jng.: Jungraithmayr, JS: Jungraithmayr & Shimizu, KM: Kießling & Mous, LS: Lamberti & Sottile, LVC: Leus, Van de Loo, Cotter, Mkr.: Mukarovsky, MM: Majzel' and Militarev, Mnt.: Montgolfier, Nct.: Nachtigal apud Lukas, NM: Newman & Ma, OS: Orel and Stolbova, PAM: Prasse, Alojaly, Mohamed, PG: Pillinger & Galboran, PH: Parker & Hayward, Prh.: Porhomovskij, RB: Rapp and Benzing, Rn.: Reinisch, Srl.: Sirlinger, TC: Taïne-Cheikh, TG: Takács, TSL: Tourneux, Seignobos, Lafarge.

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**New lexical materials for the Proto-Afro-Asiatic  
anatomical and physiological terminology I:  
Body part names with initial labials:  
General terms, head and neck<sup>1</sup>**

**Gábor Takács**

Department of Classical Philology, University of Łódź (UŁ)

Lexicographical Library of Afro-Asiatic Root Research at Balatonederics (LLAARR)

Member of the Associazione Internazionale di Studi sul Mediterraneo e l'Oriente, Roma (ISMEO)

e-mail: gabtak@datatrans.hu | ORCID: 0000-0002-2466-6451

**Abstract:** Gábor Takács, *New lexical materials for the Proto-Afro-Asiatic anatomical and physiological terminology I: Body part names with initial labials: General terms, head and neck*. The Poznań Society for the Advancement of Arts and Sciences, PL ISSN 0079-4740, pp. 107-144

The paper constitutes the first part of a long-range series of studies gradually elaborating the enormous new materials of the ancestral anatomical-physiological vocabulary of Proto-Afro-Asiatic, supposed to be the earliest known parental language spoken by the earliest known neolithic community on earth. This series is parallel to the author's ongoing projects for a comprehensive analysis of the diverse segments of the immense new cultural lexicon that has emerged in course of the author's root research over the past some three decades.

**Keywords:** Afro-Asiatic (Semitic-Hamitic), Semitic, Egyptian, Berber, Cushitic, Omotic, Chadic, comparative linguistics, etymology, anatomical-physiological vocabulary.

## **Introduction**

Our knowledge is still utterly poor and imperfect about the ancestral lexical stock of the presumably most ancient language family known on earth, called traditionally Semito-Hamitic (SH) and labelled more recently as Afro-Asiatic (AA) after J.H. Greenberg or as

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Afrasian after I.M. Diakonoff. Both were founding fathers of “modern”<sup>2</sup> AA comparative linguistics starting from the middle of the 20th century.

The various attempts at (re)constructing a common AA lexicon over the past 75 years have hallmarked diverse stages in the evolution of research on AA comparative phonology and root stock that can be roughly summed up as follows:

- **1.** The *Essai comparatif* ... by M. Cohen (1947)<sup>3</sup> summed up (even if it left by far not closed) the comparative materials of the so-called “Semitic-Hamitological” era of some one whole century<sup>4</sup> whose common characteristic trait was first of all an almost “lawless” omnicomparatistic jungle of ad hoc look-alikes and pure guesses at random, so typical of all other similar pioneering phases of comparative linguistic domains. The ever-lasting merit of the French milestone is its attempt to restrict the disturbing mass of diverse guesses to some minimum and into certain frames of 4 AA branches where, however, Chadic (although it had already known by that time as an AA branch thanks to the research by J. Lukas in the 1930s) was dismissed as a whole with the exception of Hausa.
- **2.** The trend of a special Egypto-Semitic comparison, whose most flourishing phase (1892-1936) was greatly overlapping with the long century of the previous trend, has resulted in firm sound laws based on hundreds of isoglosses (best summed up in the GÄSW from 1936) though, but this kind of research, being restricted to two geographically neighbouring branches only (which recently turned out to be classifiable in the same NAA block anyway),<sup>5</sup> was *eo ipso* doomed to show us little about PAA.
- **3.** The undeservedly little-quoted, albeit epoch-making small paper on the regular correlates of the initial labials of the Angas-Sura group (West Chadic) with ancient Egyptian by J.H. Greenberg (1958), who has established a new classification of the African language families (1955, 1963), is to be regarded with full right as the first successful attempt at identifying genetically shared special phonological traits in both pharaonic Egyptian and a remotely akin modern African group from the SAA block. This study, just some decade after the *Essai comparatif* ..., substantially changed the prospects of an AA phonological comparison after a long century of chaos,<sup>6</sup> which would be tempting to confuse with the so-called

<sup>2</sup> Although the schools of both Greenberg and Diakonoff have luckily reckoned with the omnicomparatistic chaos so much characterizing the state-of-the-art in the lexical comparison prior to the 1950s and so their output has certainly deserved to be regarded as a milestone bringing something radically new, still, for both subjective and objective factors, not even they and their pupils could rigorously introduce all the infrastructure of Indo-European Neo-Grammarian comparative-historical methodology into our little-cultivated domain.

<sup>3</sup> Assessed most recently on its 75th anniversary in all its aspects by the present author in a special study: “Semitic-Hamitic or Afro-Asiatic consonantism and lexicon: Episodes of a comparative research I (Part 2: Marcel Cohen’s *Essai comparatif*)”, *Lingua Posnaniensis* (Poznań) 64/2 (in this volume), 177-209.

<sup>4</sup> Examined most recently in the comprehensive survey by the present author, entitled “Semitic-Hamitic or Afro-Asiatic consonantism and lexicon: Episodes of a comparative research I (Part 1: The long century of Semitic-Hamitology until the middle of the 20th century)”, in *Lingua Posnaniensis* (Poznań) 64/1 (2022), 135-173.

<sup>5</sup> Cf. the survey by G. Takacs (2015) on the AA isomorphs demonstrating basically two blocks of the macro-family: NAA (Semitic, Egyptian, Berber) vs. SAA (Cushitic, Omotic, Chadic).

<sup>6</sup> From where, as the only exception, there had merely emerged towards the end of that long century the pioneering special studies by E. Zyhlarz on Egypto-Berber (1932-3: 82-110, §B.I; 1934) and on Egypto-Bedawye (1932-3: 161-181, §B.II) as well as by W. Vycichl (1934) on Egypto-Hausa, which all aimed at drawing regular

“mass comparison” usually labelled on the works by Greenberg, which is only partly true. Still, the Greenbergian impact has resulted since the 196/70s in pioneering enterprises by scholars from the United States to Germany, beside the accelerated basic field research, both for achieving the ancestral phonologies and lexicons of a few (all too few) SAA (sub)-branches (Chadic, Omotic, Cushitic)<sup>7</sup> as well as in further daring attempts at setting up regular correspondences between the lesser-known SAA branches vs. Egyptian/Semitic.<sup>8</sup> It was the Greenbergian era that has made research over the *Lautgeschichte* SAA branches yield the first serious results that has facilitated an open-minded new attempt at finding lexical concordances with Semitic (or more rarely Egyptian) by interbranch comparison (cf. Rabin 1983), in fact, à la Greenberg 1958, for sorting out the regular correlates, albeit all this was meant without reconstructions.

● 4. The Russian school of AA comparative linguistics has clearly made even a whole series of further giant steps towards our ultimate goal since the 1960s in terms of venturing to comprehensively reconstruct the PAA roots for the first time by equally using all the six branches’ lexical stuff. It is to them that we owe thanks, a.o., also for their genuine vision about a whole series of fundamental matters: PAA root structure,<sup>9</sup> consonantism,<sup>10</sup> glottochronology of the AA dispersal,<sup>11</sup> a lexically more or less established proto-culture,<sup>12</sup> Chado-

consonantal and lexical matches. These, however, were not that convincing. In addition, unfortunately, neither of these attempts were continued in those decades by either author.

<sup>7</sup> Where the exemplary rigorous application of the neo-grammarians methods by H.-J. Sasse (1979) for the ECu. historical phonology has long been by far outstanding, which not all the SAA researchers succeeded to attain. Luckily, the same path was followed by P. Black (1974) in LECu. and by G. Hudson (1989) in HECu., resp., which secures fertile soil for preparing a complete ECu. comparative dictionary.

<sup>8</sup> In this trend or era, most notable is the reserved and careful attitude of Ch. Rabin in how, as he (Rabin 1982a) formulated himself, “A Semitist looks at Chadic” and other SAA branches for identifying the common roots shared with Old Hebrew and ancient Semitic. His minor papers have brought forth a number of convincing cognates of Semitic roots from Cushitic and Omotic as well as from Chadic (Rabin 1974: 26-27; 1976: 39; 1977; 1982a; 1982b), albeit he refrained from setting up a system of concordances and proto-forms, so, at the first glance, his efforts may seem to adhere to Greenberg’s “mass comparison” method. Still, in a way, he may be regarded as the forerunner of A. Dolgopolsky’s ingenious pilot studies of the Semito-Cushitic consonantal correspondences from the 1980s.

<sup>9</sup> Cf. Diakonoff 1965: 27-36; 1970; 1988: 42-50, §2.1-§2.7; 1992: 65-97, chapter 4.; D’jakonov-Porhomovskij 1979: 82-83, §B.

<sup>10</sup> Cf. the substantially new principles and vision of the PAA phonological reconstruction especially as for the affricates and the postvelars pace A.B. Dolgopol’skij’s 1973 SIFKJa (D’jakonov 1965: 17-27; D’jakonov-Porhomovskij 1979: 79-81, §A; Diakonoff 1984: 4-9; 1988: 34-40, §1; 1992: 5-35, chapter 1.; D’jakonov et al. 1987: 9-28; 1993; Militarev 1983: 99-100; Militarev-Stolbova 1990: 45-72).

<sup>11</sup> Following the pioneering lexicostatistical enterprise of Ch. Rabin (1975, applied for Sem.) and M.L. Bender (1971, applied for Om. vs. AA), the first comprehensive glottochronological callibration of PAA has been ventured in a revolutionary paper by I.M. Diakonoff (1975) on the basis of Semito-Cushitic isoglosses and thus he has opened the path for a whole series of studies by A.Ju. Militarev (1983: 104-105, fn. 34; 2000 MS; 2001: 17-18; 2002a: 18-19; 2004; 2005; Militarev-Starostin 1984: 44; Militarev-Šnirel’mān 1984: 50 etc.) on a repeatedly refined glottochronological callibration (on whose refined methods cf. the basic study by S.A. Starostin 1989). The Sem. < AA basic vocabulary (100 wordlist) was examined in a series of lexicostatistical-etymological papers by Militarev (2010; 2011; 2012; 2014; 2015).

<sup>12</sup> Starting from the promising model of reconstructing the Semitic ancestral culture from the proto-lexicon (cf., e.g., Fronzaroli 1960, 1964-1971, 1975; Tyloch 1975; Conti 1978), the Russian authors have ventured the

-Egyptian *Sprachbund* attested by a peculiar shared cultural vocabulary,<sup>13</sup> areal contact ties of (P)AA with other language (familie)s,<sup>14</sup> and two homeland theories,<sup>15</sup> let alone for three radically new comparative AA dictionaries: two unfinished<sup>16</sup> and one by far imperfectly completed.<sup>17</sup> Henceforth, it may safely be stated that the Diakonoff school has brought us much further and closer to PAA than any other trend in the AA domain during the whole 20th century. Along with the Greenbergian trend, it has resulted in fundamental changes of our view in this domain. Still, in their eager efforts to immediately penetrate down until the

same about PAA: Diakonoff 1981: 31-63, §III-§V; 1998: 213-216 (examined from the far-reaching standpoint of the PSem. agricultural lexicon); Diakonoff & Kogan 2001 (Sem. < AA kinship terms); Militarev 1983: 100-104 (agriculture); 1984a: 14-24; 1984c: 58-60; 1986 (crafts); 1989: 129-131 (agricultural terms); 1990: 74-84; 2001: 15-42; 2002a: 20-54 (PSem. < AA); 2002b: 135ff.; 2003 MS; 2009: 99-106 (domesticated cattle, pastoralism); 2019; Kogan-Militarev 2005 (Sem. < PAA fauna); Militarev-Nikolaev 2020 (PAA names of the ungulate animals) and 2021 (PAA names of non-ungulates); Militarev-Šnirel'man 1984: 35-49; 1988; Militarev-Orel-Stolbova 1989: 137-158 (PAA terminology of dwelling), and several further papers later on, Orel-Stolbova 1989: 88-89 (Cu.-AA terms of dwelling and clothing); Orel 1993 (a general overview of cultural terminology); 1995 (PAA vs. NCaucasian cultural terminology); Stolbova 1997 (Chadic-AA vocabulary of "water"); 1999: 213-219 (Chadic-AA terminology of "house", "town", "wall"); 2002: 287-292 (Chadic-AA terms of family and social life); 2005: 29-39 (Chadic-AA vocabulary of "fishing" and "hunting"); 2008a MS Moscow (Chado-AA fish and bird names < Nosstratic etymologies); 2008b MS Naples (AA terms for "child"); 2018 (Ch. < AA agricultural terminology); 2020 (Ch. < AA vocabulary of sorcery). The early papers by Militarev from the 1980s on the PAA agricultural terminology greatly affected the daring study on "The diffusion of agricultural terms from Mesopotamia" by V. Blažek and C. Boisson (1992), another milestone in this field which, of course, posed more puzzling questions than it has solved. Cf. also Blažek 2013 (matches of PAA vs. PIE zoonyms).

<sup>13</sup> Cf. Diakonoff 1988: 23-24; 1996: 293-294 (in general); Orel & Stolbova 1989: 131-136 (§I: society, §II: dwelling, §III: household vessels, §IV: clothing, §V: weapons, §VI: agriculture, §VII: alimentation, §VIII: shipping); Orel & Stolbova 1988 MS and 1992: 167-180 (Cu.-Ch.-Eg. shared lexicon of the I. fauna, II. flora, III. society, IV. anatomy and physiology, V. nature, VI. Time, VII. material and spiritual culture, VIII. etc.); 1992: 181-203 (Chado-Eg. lexicon).

<sup>14</sup> Militarev 1985 MS (AA vs. Sumerian); 1992 MS (Ch. < AA vs. Sumerian); 1995: 117-125 (AA vs. Sumerian); 1996: 17-24 (AA vs. NCaucasian vs. Sumerian); Kovalev-Militarev 1993 and 1994 (AA vs. Sumerian); Militarev-Starostin 1984: 36-39 (AA vs. North Caucasian); Orel 1994: 37-43 (AA vs. NCaucasian).

<sup>15</sup> That is, the old Saharan hypothesis as outlined by I.M. Diakonoff (1981: 63-67, §VI; 1988: 23-25; 1996: 293-294) and the Natufian theory that was originally raised by A.B. Dolgopolskij in the early 1970s (see Diakonoff 1975: 128-130 who also adopted the idea) and developed further by A.Ju. Militarev (1983: 104-106; 1984a: 13-14; 1984c: 58; 1985 MS; 1996: 13-16; 2009: 95; Militarev-Šnirel'man 1984: 35 and 50-51; 1988: 32-38 etc.), which was later again re-adopted by Diakonoff (1995: 40-41; 1998: 216-219).

<sup>16</sup> Both versions composed by the complete Diakonoff team in Russian (SISAJa I-III from 1981-6) and the updated and re-arranged English version (HCVA I-V from 1993-7) comprise a selected PAA root inventory only with initial labials, dentals and sibilants + labials as C<sub>2</sub>. These two versions, however, represent the most promising attempts at compiling an AA root dictionary, by far more reliable as any other AA comparative dictionary ever completed in the whole 20th century history of our domain.

<sup>17</sup> The break-up of the Diakonoff team ended up in a temporary separate research (1988-1995) by its ex-member O.V. Stolbova jointly with V.É. Orel (an IE scholar) on a global Chadic comparison with Egyptian and Semitic. This collaboration culminated in their misconceived HSED with a strange methodology (proto-roots, alleged to be 10-12 thousand years old, often based on two modern forms extracted from their contexts, ill-founded proto-vowels, ignorance of the primary root meaning, authentic sources unnoticed, alarming factual errors, unchecked false forms), which rightly provoked a massive and many-sided critique (Diakonoff-Kogan 1996, Weninger 1996, Kogan 2002 in Sem.; Kammerzell 1996 in Eg.; Tourneux 1997 in Ch.; Takács 1997 in Eg./AA; 2018: 239-244 in Eg.). Thus, although the HSED in principle covers all root initials, it stands by far more distant from the optimal.

PAA level, the Russian linguists have almost always only been engaged in acquiring and working with proto-lexicons of an entire branch in the best case,<sup>18</sup> so they massively neglected the more recent diachronic SAA levels in most segments of their comparative lexical contexts (the only exception being the early WCh. works by O.V. Stolbova),<sup>19</sup> whence their asterisked forms have limited value especially if their isolated modern data are basically selected for global AA comparison from those SAA domains where we can only rely upon recent records basically from the 19th-20th centuries and there have hardly been any preparatory historical phonological researches in this direction. Thence, even if the neo-grammarian principles have here been applied more than in any other trend, one has to regard the Russian efforts too, with regrets, as only partly effective and as all too much uncertain due to differing from the urgent particular requirements of our domain.

● **5.** The only reasonable way out for the future to carry on the comparative research on the common AA lexical stock on more solid grounds would be first following the pioneering path of micro-reconstructions best elaborated since the 1970s for ECu. in the Greenbergian era in one-by-one reconstructing the missing (or so far considerably failed, i.e., misreconstructed)<sup>20</sup> most and more recent sublevels of the so many individual SAA language groups and only thereafter might one in the second step (and only) venture fulfilling the destiny of the ingenious old Russian vision or working hypothesis of PAA phonology as outlined in the works by A.B. Dolgopolsky, I.M. Diakonoff, A.Ju. Militarev and O.V. Stolbova by re-

<sup>18</sup> Cf. A.B. Dolgopol'skij's (1973) revolutionary first monograph with the global reconstruction of Proto-Cushito-Omotc (SIFKJa), a rare instance of books in Cyrillic and Russian to be unusually frequently quoted even by the western scholars, in which no attempt is made at gradually setting up first the sublevels like PAgaw, PECu., PSCu., POMeto, PKefoid, PMao, PDizoid, PARoid etc. Only the West Chadic comparative lexicon by O.V. Stolbova (1986; 1987) has been exemplarily founded on the necessary minutious reconstruction of proto-lexicons in all the underlying individual West Chadic groups like Angas-Sura, Ron, Bole-Tangale, N- and SBAuchi, etc.

<sup>19</sup> Her West Chadic comparative consonantism was based on her minutious reconstruction of the individual WCh. groups like Hausa, AS, Ron, BT, NBch., SBch., BN (Stolbova 1986: 82-113 and more extended 1987: 37-143: comparative phonology, 144-240: comprehensive WCh. lexicon). Still, for phonological reasons, not all of her *comparanda* convince us.

<sup>20</sup> Such as the all too premature reconstruction of Proto-Cushitic (Dolgopol'skij 1973, Ehret 1987, Bender 2020), Proto-Omotc (Bender 1987, 1988, 2003), Proto-Chadic (Newman 1966, 1977, JS 1981 and JI 1994 I, Stolbova 1996, 2016, CLD), Proto-West Chadic (Stolbova 1986, 1987), Proto-Central Chadic (Gravina 2014). The common drawback of these pioneering efforts is an all too overwhelming rôle of the *ad hoc* factor due to a number of diverse reasons, first of all the neglection of the smaller units/groups to be reconstructed first (except for Stolbova's WCh. and Gravina's CCh.). Thus, e.g., Dolgopol'skij worked with an amalgamate mass of Cushitic-Omotc parallels to obtain his proto-forms right in the first step without making any efforts to first set up sublevels like Proto-Agaw, Proto-East Cushitic etc., although he greatly relied upon external cognates from Semitic and Egyptian. Ch. Ehret, on the contrary, although he too rigorously adhered to build up his Proto-Eastern Cushitic phonology, allowed a number of semantically all too vague and unreliable *comparanda*. The main weakness of R. Gravina's entirely introverted system of CCh. proto-forms built upon his detailed systematic group reconstructions is that he fully ignored the factors of external (AA) comparison, which has, unfortunately, resulted in apparently going astray all too often with his PCh. *postulata*. In this respect, it is methodologically by far behind Stolbova 1986/7. But the Muscovite Chadacist has, unfortunately, also followed the easier path of hasty globalistic comparison in the later/more recent decades of her Chadic research when constructing her PCh. without systematically taking care of all the 27 individual groups, without achieving their distinct comparative phonologies and proto-lexicons in the first step.

-verifying it under the new conditions and by setting up a comprehensive new system of the AA consonantal concordances.

Until then, however, that is, until we are really able to progress through the time-consuming 5th path, for which evidently team work would be needed, we had, better to stick to exploiting the common AA root stock from those domains where a *Lautgeschichte* has either already been firmly established (as evidently in the NAA branches<sup>21</sup> (except for Egyptian),<sup>22</sup> Bedawye,<sup>23</sup> Agaw,<sup>24</sup> Eastern Cushitic,<sup>25</sup> West Rift,<sup>26</sup> and at least some of the Omotic<sup>27</sup> and

<sup>21</sup> The case of Egyptian phonological reconstruction is not without uncertainties as we are dealing here with a basically non-diverging continuum over millennia without a comparative basis, cf. Vergote 1973 Ib; Vycichl 1990; Peust 1999; EDE I 49-332 and 394-400.

<sup>22</sup> The bases of Semitic comparative-historical phonology has long been elaborated (Brockelmann 1908 = GVGSP I; Moscati et al. 1964 etc.) and now refined, see the most recent overviews (esp. consonants) like Dolgopolsky 1999: 16-38, §5; SED I LXVII-CXXVIII, §2; Kogan 2009: 25-35, §6; 2011: 54-126. The common Semitic lexicon has also been accumulated (DRS, almost half complete) and historically elaborated according to semantical domains (Fronzaroli 1964-1971; Huehnergard 2000; SED I-II; Kogan 2011: 179-249 with a comprehensive historical dictionary covering many semantical domains on pp. 189-242, §2-§9 on the analogy of Fronzaroli 1964-1971; Kogan 2015). For the state-of-the-art in Berber historical phonology one may best consult Kossmann 1999 (but cf. also Militarev 1991c: 183-207, §1), while a comprehensive treasury of its root stock has partly been achieved in DRB (cf. also Militarev 1991d: 250-265 with a basic common Brb. vocabulary of 40 semantic items).

<sup>23</sup> The case of Bedawye (Northern Cushitic) historical phonology (another non-divergent subbranch represented by one single language continuum) is not entirely as desperate as that of Egyptian, given the chances of comparison with the other closely related Cushitic subbranches, see Blažek 2007.

<sup>24</sup> Agaw (Central Cushitic) sound laws have been elaborated in the monograph by D. Appleyard (2006: 10-20: phonology, pp. 21-151: comparative lexicon) based on a long research of some three decades (cf. Appleyard 1984; 1991).

<sup>25</sup> The outlines of an Eastern Cushitic historical phonology were masterfully demonstrated in the epoch-maker studies by P. Black 1974 (PLOWland ECu.) and then by H.-J. Sasse 1979 (PECu.), which are simply and unfortunately unchallenged in our SAA domain in terms of their strict and secure neo-grammarians methodology and highly reliable quality. But the follow-up attempt at PECu. by Ch. Ehret (1991) with a somewhat modified vision has often semantically vague *comparanda*. The work of P. Black (1974) was complemented by G. Hudson's (1989: 7-11) sketchy Highland East Cushitic historical phonology and PHECu. wordlist (Hudson 1989: 404-424) is thus safe, albeit neither of them are exhaustive, and so a major share of the HECu. comparative vocabulary (Hudson 1989: 28-173) and the wordlists of the individual HECu. daughter languages (Hudson 1989: 176-402) were not entirely exploited for a detailed PHECu. root inventory. Still, with these tools and the materials of Dullay (AMS 1980) and Yaaku (Heine 1975), most of the conditions are standing by for a comprehensive reconstruction of a complete Eastern Cushitic historical lexicon, a long awaited *desideratum*.

<sup>26</sup> Thanks to the researches by W.H. Whiteley (1958), E.D. Elderkin & J.B. Maghway (1992), R. Kiessling and M. Mous (2004), the reconstruction of the West Rift group of SCu. is safe, which is a firm starting point for a desirable completely revised new Southern Cushitic root dictionary. Such a project, which is executed by using, a.o., also the usable materials of Ch. Ehret's (1980) all too disputable volume, is now ongoing in the frames of the present author's ARR research (supported by the University of Łódź) in the Lexicographical library of Afro-Asiatic root research (LLAARR at Balatonederics). The SCu.-AA consonantal concordances have been explored by A.B. Dolgopolskij (1987: SCu.-Sem. laterals) and G. Takacs in general (1999c: 393-426; 2000: 69-117), in the field of sibilants (Takacs 2003b: 143-162 and 2005b: 65-83; 2009c: 135-142), the Ma'a sibilants (Takacs 2002a: 109-133; 2009b: 125-131: Ma'a š-), and the West-Rift ph/laryngeals (Takacs 2005c: 213-225; 2010: 91-122).

<sup>27</sup> Where the *Lautverschiebungen* have not yet been definitely settled and a common lexical stock not yet fully established in spite of the giant, albeit global Omotic, steps by M.L. Bender (1987, 1988, 1994b, 2003), cf. also the equally global Cushomotic ("Old Cushitic") comparatistic research by M. Lamberti (both 1993 vols., LS 1997)

the 27 Chadic groups<sup>28</sup> or where we have at least some analogies for a working hypothesis that could project some light on the historical background of the *comparanda* coming from the *lautgeschichtlich* more obscure groups.

It is with this strategy that the first volume of my EAAN<sup>29</sup> project elaborating more than one thousand new AA roots (in addition to the aforementioned existing comparative dictionaries) on the basis of my research starting in the 1990s. This material facilitates extended research on diverse segments of the AA ancestral root stock, both basic and cultural. This present series of papers, with a revised and enriched set of roots, is to shed more light on the anatomical and physiological knowledge of a supposed early neolithic community.

### General terms of body

**1. PAA \*√Pk** (presumably \*f- better than \*p-)<sup>30</sup> “1. body, 2. belly” [GT]: PBrb. \*ta-fækka “body” [GT] > NBrb.: Shilh ta-fkka “charogne” [DRB] || SBrb.: Ahaggar ta-fekka, pl. ti-fekk-aw-în “corps (partie matérielle d’une personne ou d’un animal vivant ou mort)” [Foucauld 1951-2: 313], EWlmd. ta-fækka, pl. ši-fèkk-aw-en, Ayr to-fækka, pl. to-fèkk-aw-en

with a rather deviant working hypothesis about the “Cu.-Om.” *Lautgeschichte* followed passim by the latter (cf. also esp. Lamberti 1988, 1992). The only serious attempt at a comprehensive elaboration of the historical phonologies and lexicons in the individual Omotic groups was the book by M.L. Bender (2003), where the basic and/or extended lexicon of each group was examined separately with the outcome of frequently *ad hoc* ancestral forms, but the detailed evaluation of all these results is still ongoing, so a making well-founded and definite statement on the qualities of this *magnum opus* milestone would still be premature. Some of the Omotic groups had already been individually examined by others with some implications about the historical phonology: Kefoid/Gonga (Fleming 1987, Lamberti 1992), Mao (Fleming 1988a), Aroid (Fleming 1988b, but the wordlist in Bender 1994a also). Finally, so far, some 7 papers on the AA etymology of Omotic roots have appeared (as a sort of a prelude to the fascicles of a planned Omotic etymological dictionary) have been published by G. Takács (part I: 2011b, II: 2012b, III: 2012a, IV: 2022a, V: 2022b, VI: 2021b, VII: 2022e).

<sup>28</sup> Like ● Angas-Sura in the light of the inner (Stolbova 1972: consonants; 1977: sketchy list of PAS lexical roots; 1987: 240-244: selected 64 PAS etymological entries; Takács 2004a: historical phonology and a complete comparative lexicon; 2005a: 47-50: historical phonology) vs. external evidence (Takács 1999b: 167-175: AS \*č-; 2001: 78-96, §3: AS initial sibilants and “laryngeals”; 2003a: 105-122: AS \*gʷ-; 2011a: 148-175 etc.), ● Bole-Tangale (Stolbova 1987: 244-248: selected 64 BT proto-roots; Schuh 1984: vowel reconstruction with a large collection of BT etymological entries, both verbs and nouns, a comparative comparative lexicon is now forthc. by M. Liesner), ● Northern Bauchi (Stolbova 1987: 248-261 based on the lexical stock accumulated in Skinner 1977: a considerable comparative wordlist with 185 reconstructed entries; Takács 2001: 97-114, §4: NBch. initial sibilants and “laryngeals”; 2002b; 2007, all three papers yielding segments of a NBch. historical phonology; 2011a: 176-199: comprehensive overview), ● Southern Bauchi (Stolbova 1987: 261-263 based on the lexical stock accumulated in Shimizu 1978: some 47 etymological entries), ● Mafa-Mada (Rossing 1978), ● Musgu and ● Masa groups (Takács 2013: roots with initial laryngeals and pharyngeals in their AA context, comparative lexicons forthc.), ● Dangla-Migama and ● Mubi-Toram (comparative lexicons forthc. by G. Takács, who has so far released a number of pilot studies into the AA background of DM and MT roots, cf. Takács 2009-2010; 2009a; 2021a; 2022c and Takács 2009e; 2021 forthc.; 2022d, resp.).

<sup>29</sup> Etyma Afroasiatica Nova (EAAN). Its first vol. appeared in Berlin, 2016, which is containing either new AA roots or new cognates to known AA roots with initial labials (AA \*b-, \*p-, \*f-, \*m-).

<sup>30</sup> The Chadic voiced labiodental fricative, which may either be due to a secondary spirantization of a bilabial stop or historically inherited, may in this case suggest an inherited PAA \*f-.

“corps” [PAM 1998: 60], Taneslemt (Timbuktu, Mali) ta-fekka, pl. či-fekka-w-én “1. corps (anatomique), 2. tronc” [DRB], Ghat ta-fekka “corps” [Nehlil 1909: 145] (Brb.: DRB 550) || perhaps NOm. \*fik-n “1. belly, 2. heart” [GT] > Gimirra: She pikn “belly” [CR in Bender 2003: 159, #9, cf. also #69 s.v. “heart”] vs. She fikn “heart” [Fleming] = \*fikn [Muldrow] “heart” (Gimirra: Bender 2003: 167, #69) | (???) Yemsa fiko “throat”<sup>31</sup> [Fleming in Bender 2003: 170, #93] | Sheko fik-n “heart” [Fleming in Bender 2003: 211, #69] (NOm. = She + Sheko: Bender 2003: 240, #69) || CCh. \*√vK “body” [GT]: Matakam vák [Rossing] | Glavda vəghá [Rapp, so also Wolff], Cena vəghá [Wolff 1974-5: 205], Dghwede vğà [Frick] | (?) Lamang ghèvà [Lukas], met. < \*vəghà [GT]? (CCh.: JI 1994 II, 34-35). See EAAI I 112, #539; Takacs 2021b: 103, #224.

**2. SAA** \*√mt “bone” [GT]: Bed. mīta “Knochen” [Reinisch 1895: 175]<sup>32</sup> || WCh.: perhaps PAngas \*m<sup>w</sup>at “trunk, stem (of a tree)”<sup>33</sup> [GT 2004: 259] | Sbauchi \*m<sup>w</sup>at “bone” [GT]: Zaar mwæt [IL apud JI 1994 II 36], Zaar of Gambar Leere mwæt [Shimizu], Zaar of Lusa mwæt [Shimizu], Zakshi mwat [Shimizu] (SBCh.: Shimizu 1978: 21). See EAAI I 128, #626.

**3. PAA** \*√mS “joint of body” [GT]: NBrb.: Zemmur ta-měšaš-t “rotule” [Laoust 1918: 4] || LECu.: Afar mās-ayya (f) “joint of body” [PH 1985: 158]. See EAAI I 146, #714.

**4. PAA** \*√bn “nerve, tendon” [GT]: Sem.: Akk. buānu, st.cstr. buânê “Bänder im Körper, auch die Adern, Nerven, Sehne, Muskel usw.” [Holma 1911: 4] || LECu.: Saho bān-ŏ, pl. bānūn (f) “Sehne, Nerv” [Reinisch 1890: 84] || CCh.: (?) Kotoko vōnē ġsi [v- not clear] “artère, veine” [Mouchet in Sölken 1967: 264, #329] || Ech.: Migama bīnnyè “tendon” [JA 1992: 70], WDangla bīnyinyò (m), pl. bīnyàny “nerfs du corps, corde avec nerfs” [Fédry 1971: 89]. Cf. EDE II 193; EAAI I 42, #152. Cf. also the next entry, which may be eventually akin to this root.

**5. PAA** \*√bn “1. some string-like (or sim.) part of the body, 2. rope” [GT], cf. Sem.: Akk. (Bab.) abunnatu “1. Nabelschnur, 2. Nabel” [AHW 9] = “cordon ombilical, nombril” [DRS 4]<sup>34</sup> || (???) Eg. bn.t “Harfe” (OK, Wb I 457, 5),<sup>35</sup> originally a collective fem. \*“(strings)” (?) || NBrb.: Mzab t-bani-t “pelote de petite taille composé de duites, fils de trame” [Delheure 1984: 9], Figuig t-buney-t “poignée de laine” [Kossmann] (NBrb.: DRB 80) || LECu.: (???)

<sup>31</sup> Phonologically, it is very hard to assume any of its connection with NOm.: Male baḳana “neck” [Bender 2003: 60, #93: isolated] (see part IV). For the same considerations, its cognacy with the biradical stem of NOm. \*fik-n “1. belly, 2. heart” [GT] is so much apparent, although hard to explain semantically.

<sup>32</sup> Cf. also Lamberti 1993a: 352 with a false Cu. etymology.

<sup>33</sup> I.e., metonymy allowing to view the stem of a tree as something similar to bone?

<sup>34</sup> D. Cohen (DRS l.c.) combined the Akkadian root with that of Ar. ʔabn-at- “noeud, nodosité dans une tige d’arbre etc.” [BK I 6], which is, however, semantically rather dubious the root meaning of the latter being quite different, cf. Ar. ʔabin- “épais, épaissi (se dit des mets ou des boissons peu liquides)” [BK].

<sup>35</sup> For alleged Africal parallels of the Egyptian term “harp” see Cottevieille-Giraudet 1937-1940: 32-33. Its striking similarity to Sem.: Akk. (Oakk., O-Ybab.) tibbittu ~ timbuttu ~ tibbūtu ~ tib(b)uttu ~ tib(b)ūtu, jBab. also tambūtu? ~ timbuʔu ~ tibuʔu “1. eine Harfe, 2. eine Grille” [AHW] may be pure chance.

Oromo fāñ-ō [irregular f- < \*b-] “Schnur, Strick” [Reinisch 1890: 84] ||l ECh.: Mokilko bōnné (m) “corde” [Jng. 1990: 67]. Cf. EDE II 194; EAAN I 42-42, #153. Cf. the preceding entry.

**6. S<sup>2</sup>AA** \*√mn[ʒ] ~ \*√mnS < \*\*√mmZ/S (partial redupl.?) “1. blood, 2. red (material)” [GT]: Eg. mnš.t “Mennige, Rötel” (Med., Spiegelberg 1906: 158) = “some sort of clay (in constant connection with ztj ‘yellow ochre’): red ochre (μίλτος)” (Iversen 1955: 19-21, 28-34; WÄDN 246-7; Borghouts 1971: 43-44, n. 21; PL 437; Leitz 1999: 99) = “an ochreous earth used as pigment (but its colour is not definitely identified), probably red” (Harris 1961: 146-7) = “ocre rouge” (Aufrère 1990: 652-3, 659, 742, 765) = “Ocker (viell. roter)” (GHWb 342) ||l HECu. \*munz/ʒ-<sup>36</sup> “to bleed” [GT]: Sidamo mund-a “to bleed”, mund-ē “blood” [Gasparini 1983: 241; Cerulli 1938 II 214], Darasa (Gedeo) mund-a?- “to bleed”, mund-é “blood” [Hudson] (HECu.: Hudson 1989: 28) ||l WCh.: EHausa mǎnǎǎ “red dye, mostly prepared from the red leaf-sheaths of a variety of millet” [Broß quoted by Ibr.-Gimba 1994: 134] ||l CCh.: Bura-Margi \*maṇza (?) “red” [GT]:<sup>37</sup> WMargi muṇzà [Kraft], Chibak mǎgzà [Kraft], Bura mamzà [Kraft] = mamsa [Hoffmann in Reutt & Kogan 1973: 92], Ngwahyi mǎmzà [Kraft] (CCh.: Kraft 1981: #274). Cf. Takács 2009d: 228-229, #430; EDE III 325; EAAN I 168, #828.

**7. PAA** \*√m<sup>o</sup> (extended var. \*√my<sup>o</sup>) “phlegm, slime” [GT]: Sem. \*√my<sup>o</sup> “to flow (of efflux?)” [GT]: presumably Akk. māʾu [irregular -â- instead of -ê-] (a/jB) “(Galle) erbrechen” [AHW 637] || Ar. √my<sup>o</sup> I: māʾa “1. couler doucement en se répandant à la surface du sol” [BK II 1172] = “to flow (liquid)” [Leslau] || Geez √my<sup>o</sup>: meʾa “1. to become water, melt, liquefy, 2. putrefied” [Leslau 1987: 376] ||l presumably Eg. m<sup>o</sup> (determinative of bodily efflux) “etwas vor dem man sich hüten soll” (XVIII. Mag., Wb II 46, 12) = “etwas vor dem man sich hüten muß (in Zshg. mit Lippen)” (GHWb 327) ||l SCu.: Maʾa maʾa-tuko [-ʔ- regular < \*-ʿ-] “phlegm” [Ehret 1980 MS: 4] ||l Ch. \*miH- “phlegm” [GT]: WCh.: Guruntum mǐ “saliva” [Jaggar 1989: 187] ||l CCh.: Zime-Dari mǐē? “salive” [Cooper 1984: 17] ||l ECh.: Jegu mǐ “Rotz” [Jng. 1961: 115]. Cf. EDE III 171-172; EAAN I 158, #783.

**8. SAA** \*√bn (var. \*√bHn)<sup>38</sup> “sweat” [GT]: NOm.: Koyra bōin-ε “sweat” [Siebert 1994: 20] ||l WCh.: Chip pe-ḅan [unless < \*ḅalḅ] “sweat” [Kraft] | Dwot pup-ḅani “sweat” [Kraft] | Diri

<sup>36</sup> HECu. (Sidamo, Darasa) d < ECu. \*z [Sasse, Leslau] = \*ʒ (\*dz) [Hudson] is possible and regular (cf. Sasse 1976: 130-142, esp. 137; 1979: 19-20, also 56; Leslau 1980: 119ff.; Hudson 1989: 7-8).

<sup>37</sup> N. Skinner (1997: 79) affiliated this BM root with the reflexes of CCh. \*√mmS “blood” [GT], cf. BM \*mamši [GT]: Margi ʾmámšǐ (-tsh-) [IL], Gwara mámšǐ [Wolff], Bura mamši [Hoffmann apud RK 1973: 92] = mámšǐ [Wolff], Bura-Pela and Kilba mamši [Meek] = mǎšǐ [Grieve 1976 MS: 2, #15] (BM: Wolff 1974-5: 190, 202) | Fali-Jilbu mamzi “blood” [Kraft 1972 MS] | Gudu mamši [IL] | MM \*maṇbez [Rossing 1978: 213, #75] | Sukur mumbus [Meek] = múmbùz [IL] (CCh.: Mouchet 1953: 172; JI 1994 II 30-31). The reconstruction of the C<sub>2</sub> nasal (Ch. \*-m- or \*-n-?) and the C<sub>3</sub> sibilant (perhaps Ch. \*-ʒ- = Eg. -š-?) is uncertain. Partial redupl. of an original \*√mS? Cf. CCh.: Bata mis- “to redden” [Pweddson 2000: 56], Bachama miso-miso “red” [Carnochan 1975: 465, #85].

<sup>38</sup> The variety with \*-H- as C<sub>2</sub> has to be postulated because of the Chadic reflexes with \*ḅ- < \*\*bH-.

bəŋgəni “sweat” [Kraft] | Buli bəŋgəni [Kraft] (WCh.: Kraft 1981: #79). See EAAN I 45, #167. Derived from PAA \*√bn (var. \*√bHn) “warm” [GT]?<sup>39</sup> For the semantic connection cf. the analogy of PAA \*√df “1. to be warm, 2. sweat” [GT]?<sup>40</sup>

**9. AA \*√mT** (both varieties \*√md ~ \*√mṭ are attested) “tears” [GT]: EBrb.: Ghadames √mṭ: a-məṭṭa, pl. məṭṭa-w-en “larme” [Lanfry 1973: 220, #1049] || NBrb.: Shilh a-mṭṭa “larme” [Justinard 1914: 121] | Mzg. i-mṭṭi “pleur, larme” [Taïfi 1991: 445],<sup>41</sup> Izdeg i-mṭṭi “larme” [Mercier 1937: 153], Zayan and Sgugu i-mṭi ~ i-mṭṭi “larme” [Loubignac 1924: 568], Ait Ndir a-mṭṭa “tear (n.)” [Penchoen 1973: 107] | Nefusa i-mṭṭ-aun (pl. of a-mṭṭa) “pleurs” [Laoust] etc. | Qabyle i-mṭṭi “larme” [Dallet 1982: 527], Zwawa, Bugi i-mṭṭi, pl. i-mṭṭa-un “larme” [Basset 1890b: 316] (NBrb.: Basset 1890a: 62-63; Biarnay 1917: 90) || WBrb.: Zenaga √ndw: è-ndaw-ən (coll. pl.) “larmes” [Nicolas 1953: 227] || SBrb.: Hgr. ā-miṭ, pl. i-mṭṭ-aw-en “larme” [Foucauld 1951-2: 1163], EWlmd. a-məṭṭ, Ayr ə-məṭṭ “larme” [PAM 1998: 228], Tadghaq and Tudalt a-məṭṭ “tears” [Sudlow 2001: 281] || (?) HECu. \*indidd-o “tears of eyes” [Hudson 1989: 149] (???) < \*imdidd-o (strange HECu. \*-d- contra AA \*-ṭ-) [GT] || NOM.: PMaoid \*ʔamt- (?) “tears” [GT] > Hozo ámt-i & Sezo hamiç(i) “tear of eye” [Siebert & Wedekind 1994: 17, #25] || WCh.: Pero múḍḍi “tear (lacrima)” [Frj. 1985: 42]. Irregular alternation of -d- ~ -ḍ-. See EAAN I 131, #645.

<sup>39</sup> Cf. EBrb.: Siwa ṭa-ben-t “cucina, forno” [Paradisi 1961: 298] || SBrb.: Hgr. é-bîn “1. tout fourneau de pipe, 2. (p.ext.) pipe (tout entière)” [Foucauld 1951-2: 69-70], EWlmd.-Ayr e-ben “1. fourneau de pipe, 2. cigarette” [PAM 2003: 30] || SCu.: Ma’a ki-buné “firebrand” [Ehret 1980a: 140, §I.A.55 with false etymology] || NOM.: SEOmeto \*binn-a “warm” [Bender, Fleming] (NOM.: Mukarovsky 1981: 216-217, #57.B) || WCh. \*baHan- “hot” [GT]: AS \*bān “1. (to be) hot, 2. burn” [GT] (AS: Stolbova 1972: 180; 1977: 153, #13; Takács 2004a: 27) | SBauchi \*baʔani → \*ḥani “hot” [GT] (SBauchi: Shimizu 1978: 43, #93) (AA: further details in EDE II 609-610; EAAN I 45, #166). Note that Ch. Ehret (l.c.) misderived the Ma’a cognate from his SCu. \*bu- “fire-block”, a ghost-root based on Iraqw buʔi “fire-stick” | Qwadza biʔitiko “fire-block” | Dahalo ḥuw-ēḍ- “to boil (sg.)”.

<sup>40</sup> Cf. Sem.: Ar. dafiʔa “to be warm” [Ember] = dafʔ- “Wärme” [Calice] = difʔ- “chaleur, vêtement chaud” [DRS] || NBrb.: Aksimen ddfa “warmth” [OS] || Bed. daf “das Rauchbad nehmen, schwitzen im Rauchbad”, dūf, pl. daf “Schweiß” [Reinisch 1895: 61] = daf “to smoke oneself, take a smoke bath”, dūf “to sweat (intr.)” [Roper 1928: 169], Ammarʔar (ʔō) duf “Schweiß” [Reinisch] = (ʔu) dāfa “очар с благовоениями, в котором парятся” [Dlǵ.] | NAgaw: Bilin dif “Schweiß” [Reinisch] || LECu.: Oromo dafqa “1. Schweiß, 2. sieden, kochen” [Meinhof] = “1. to perspire, 2. perspiration” [Hudson] | HECu.: Darasa daff- “to perspire”, daff-a “perspiration” [Hudson 1989: 112] || WCh.: Hausa dāfā “to cook” [Abraham 1962: 164] | Ngizim ḍāafāu [irregular ḍ-] “heat (of environment), perspiration” [Schuh 1981: 53] = ḍāfau “sweat” [Kraft] || CCh.: PMandara \*ngu-ḍufa “sweat” [GT] (Mandara data: Kraft 1981: #79) | Muktele āndif “to sweat”, andif “hot” [Rossing 1978: 273, #376 and 339, #709] | PKotoko \*(mV)-dāfu “hot” [GT]: cf. esp. Logone mūtūf? ~ mētfu ~ mótfū “verschwitzt, warm, Hitze, Schweiß” [Nachtigal in Lukas 1936: 111] (Kotoko: Lukas 1937: 145, 147, 154; Porhomovskij 1972: 41, #21.3) | (?) Musgu dāfū [unless < \*d-afū] “heiβ” [Barth in Lukas 1941: 43]. For further details of this well-known AA root see EDE II 609-610.

<sup>41</sup> Its derivation from tiṭṭ “eye” (Taifi l.c.) may be merely a *Volksetymologie*.

## Head

**10. PAA \* $\sqrt{\text{b}}\text{k}$**  “head” [GT]: because of the enormous diversity of the reflexes in the 2<sup>nd</sup> radical,<sup>42</sup> three distinct root varieties may be projected already for PAA, viz. (1) \* $\sqrt{\text{b}}\text{g}$  or (2) \* $\sqrt{\text{b}}\text{k}$  or (3) \* $\sqrt{\text{b}}\text{k}$ .<sup>43</sup> Cf. also EAAN I 33, #97; Takacs 2022b: 656-657, #119.

**10.1. PAA \* $\sqrt{\text{b}}\text{g}$**  “head” [GT] is only preserved in its simplex by NOm.: Yemsa (royal language) \*beg- “head” [GT] > Yemsa (Janjero) bāg, bāg-besi “testa (linguaggio regale)” [Cerulli 1938 III 70] = beg-à “Kopf (Respektsprache)” [Lamberti 1993b: 330] (Yemsa: Bender 2003: 166, #67). The biconsonantal root was apparently only preserved intact in Omotic, but two further root varieties, extended by different 2<sup>nd</sup> radicals,<sup>44</sup> suggest that all these reflexes may be projected for PAA:

**10.1.1. PEG. \* $\sqrt{\text{b}}\text{g}3$**  (i.e., possibly < AA \* $\sqrt{\text{b}}\text{gr}/\text{l}$ ) > Eg. bd3 [-d- reg. < \*-g-] (head det.) ‘(Substantiv)’<sup>45</sup> (PT 2083b hapax, GHWb 267). Skull was conceived as a sort of vessel in the neolithic Nile Valley.<sup>46</sup> May be thus ultimately related with PAA \*bag<sup>w</sup>-ar “kind of vessel (from various materials), вид сосуда (из различного материала)” [Militarev 1984a]<sup>47</sup> = \* $\sqrt{\text{b}}\text{gr}$  (perhaps \*bugur) “sort of vessel” [GT]<sup>48</sup> Cf. EDE II: 366 and EAAN I: 29, #70.

**10.1.2. Brb. \* $\sqrt{\text{b}}\text{gn}$  > \* $\sqrt{\text{b}}\text{ng}$**  “1. crain, 2. head” [GT] > EBrb.: Ghadames ta-beḡna, pl. ti-beḡn-iw-īn “crâne, boîte crânienne” [Lanfry 1973: 7, #37] || NBrb.: Tuat, Gurara, Tidikelt a-bengu [-ng- via met. < \*-gn-] “tête” [DRB 77], Timimun and Gurara ta-megna [m- < \*-b-]

<sup>42</sup> The exact C<sub>2</sub> cannot be precisely reconstructed: Qabyle and Kambatta speak for \*-k, while Yemsa and the rest of Berber parallels as well as Egyptian suggest \*-g, but Dullay \* $\sqrt{\text{h}}$  can only derive from AA \*-k.

<sup>43</sup> M. Lamberti (1993a: 330) has already connected the Cushito-Omotic reflexes (Kambatta, Dullay, and Yemsa) of all the three biradical varieties with diverse velar C<sub>2</sub>.

<sup>44</sup> The exact C<sub>2</sub> cannot be precisely reconstructed: Qabyle and Kambatta speak for \*-k, while Yemsa and the rest of Berber parallels as well as Egyptian suggest \*-g, but Dullay \* $\sqrt{\text{h}}$  can only derive from AA \*-k.

<sup>45</sup> Occurs solely in PT 2083b: “The King could not chew the monthly ...”. The word was left here by R.O. Faulkner (AEPT 297, Utterance 688, n. 5) untranslated: “the meaning of bd3 with head-determinative remains obscure”.

<sup>46</sup> For the etymological evidence of the semantical connection of “head” vs. “vessel” in prehistoric Egypt, see Takács 1994a: 1994b, and 1998 (with further references).

<sup>47</sup> A.Ju. Militarev (in a paper written jointly with V.A. Šnirel'man 1984: 38), in turn, reconstructed his PAA form without, however, providing the underlying data, suggesting that \*-r did not belong to the original root.

<sup>48</sup> Sem.: Akk. (jB) bugarru “ein Gefäß” [AHW 96: “Lehnwort unbekannter Herkunft”] || (?) Eg. bd3 [if from \* $\sqrt{\text{b}}\text{gr}$ ] “Topf aus gebranntem Ton” (OK, Wb I 488, 11) = “jar” (MK, FD 86) = “Tiegel, Backform” (NBÄ 789, n. 993) = “a pot” (CED 23) = “ein Tontopf” (Satzinger 1994: 199) = “1. Topf (aus gebranntem Ton), 2. tulpenbech-förmiges Model, Brotform” (GHWb 267) || SCu.: (???) Dahalo baḡwāla [GT: irregular -l- < \*-r-] “night-jar” [Ehret 1980: 139, §I.A.47] || CCh.: Logone bugeru “Eßtopf” [Lukas 1937: 148] | Musgu bugur “Kalebasse” [Decorse in Lukas 1941: 48], Pus buguru “bol en bois” [Tourneux 1991: 78] || ECh.: Somray bàḡār “récipient creux en bois” [Jng. 1993 MS: 4] | Mokilko bōḡorō “récipient (pour les femmes)” [Jng. 1990a: 66]. Ch. Ehret (l.c.) preferred a different etymology of the Dahalo word comparing ERift: Qwadza bola-tuko ‘barbet sp.’ < SCu. \*bogwala- “night-jar (?)” (baseless).

“1. tête, 2. extrémité” [DRB 35], Mzab ta-bəžna, pl. ti-bəžn-iw-in [ž < \*g] “tête” [Delheure 1984: 18] ||| WCh.: what may perhaps appear to be a look-alike<sup>49</sup> is most probably unrelated.<sup>50</sup>

**10.2. PAA** \*√bḵ “head (originally its crane?)” [GT] > NBrb.: Qabyle a-bbay [ɣ regular < \*ḵ] “1. tête, 2. calotte crânienne” [Dallet 1982: 32] (Dallet: “rare, unique example connu”, treated so also DRB 82: isolated in Brb.) ||| HECu.: Kambatta boḵu-ta ~ boḵḵ-ākata “head” [Hudson 1989: 77: isolated] = boḵ-o “Kopf” [Lamberti 1993b: 330] ||| SEOmeto \*baḵ- “horn” [GT]<sup>51</sup> (cf. also the special entry for this item below).

**10.3. ECU.** \*bak- “head” [GT], attested solely in PDullay \*paḥ- [GT]: Harso and Dobase paḥ-té, pl. páḥḥ-e “1. Kopf, 2. Haar (Haupthaar)” [AMS 1980: 179]<sup>52</sup> < AA \*√bk “head” (???) [GT]. Cf. PAA \*√bk “hair” [GT] (discussed in EDE II: 340; EAAN I: 31, #84)?

**11. SAA** \*√br “head, top” [GT]: LECu. \*bVr- “top of head” [GT]: Somali bār, pl. bārār “Kopfseite eines Gegenstandes, Gipfel, Wipfel” [Reinisch 1902: 85] = bār, pl. bārār “tree-top” [Abraham 1964: 27], Jabarti bār “der oberste Teil eines Gegenstandes”, pl. bārār “Haarhörner, aus Haaren geflochtene Hörner auf beiden Seiten des Frauenkopfes” [Reinisch 1904: 54] | Oro-mo bor-ō “Kopfseite eines Gegenstandes, Gipfel, Wipfel” [Reinisch l.c.] || SCu.: Ma’a ki-béra “skull”, cf. also (via metonymy?) i-béra “eggshell, nutshell” [Ehret 1980: 137, §I.A.32]<sup>53</sup> ||| CCh.: Kotoko bōró, pl. bōrówé [b- < \*Hb-]<sup>54</sup> “tête” [Bouny 1978: 54] = bōrò “head” [JI 1994 II 183] | perhaps PMafa-Mada \*biri- “hat” [Rossing 1978: 268, #352]<sup>55</sup> e.g. Mafa bōráwaya “chapeau de paille pointu” [Brt. & Bléis 1990: 91]. Cf. EDE II 15; EAAN I 51, #199.

**12. S<sup>2</sup>AA** \*√ml̥ “temple of head” [GT]: Eg. m3̥ [reg. < \*√ml̥]<sup>56</sup> “Schläfe” (MK, Wb II 24; Grapow 1954: 29) = “certaine partie du corps humain, semblable des deux côtés, peut-être l’épaule, mais plutôt la joue” (Jéquier 1911: 64-65, §23) = “la tempe” (Lefèbvre 1952: 14, §13; Massart 1959: 233, §28) = temple of head” (FD 102; DCT 156: already in CT VII 184g, IV 58g) = “1. la tempe, 2. les boucles de cheveux de la tempe” (AL 79.1115) = “1. Schläfe (Mensch, Tier, Ort wo der Zopf sitzt), 2. (fig.) Aufmerksamkeit” (GHWb 318) = “side of the head, temple” (Walk-er 1996: 269) = “1. Schläfe (SAK 27, 1999: 74), 2. Zopf (SAK 7, 1979: 58, n. a)” (WD III 49) ||| SAgaw: (???) Awngi ḡari [ḡ- regular < \*m-, but

<sup>49</sup> Namely Angas băng “a headman, such as of a gang of labourers or a group of boys shepherding, etc.” [Foulkes 1915: 146].

<sup>50</sup> Cf. WCh.: Angas-Sura \*baḡ “1. great, 2. fat, 3. (hence?) chief” (?) [Takács 2004a: 10]: perhaps Gerka bong-nar-ra (so, -o-) [bo- < \*b̥a-?] “great” (cf. AS \*nār ~ \*nāzr “1. top”) [Ftp. 1911: 216], Goemay bang “fatiness, fatness”, bang-lang “fat and stout (an insult)” [Sirlinger 1937: 11] ||| Sem.: Ar. ‘abana I “1. être gros, épais et ferme (se dit du corps, d’un chameau dont les chairs sont compactes et durs)” [BK II: 159].

<sup>51</sup> M. Lamberti (l.c.) erroneously explained this from ECU. \*bVḵ- “Wange”, certainly a distinct root.

<sup>52</sup> In principle, Dullay p < \*b, and ḥ < \*k are regular (Sasse 1979: 56, §5).

<sup>53</sup> Combined by Ch. Ehret (l.c.) with Dahalo ḥedo “bare spot of ground” < SCu. \*bedʰ- “bald-spot, bare-spot, any bare hard surface”. Both phonologically and semantically far-fetched.

<sup>54</sup> Was the stem \*bor- originally extended by the prefix \*h- of the AA anatomical terms (cf. Takács 1997c)?

<sup>55</sup> M. Rossing treated the Mafa-Mada word as a loan, but he gave no source of the borrowing.

<sup>56</sup> Extended with the AA affix \*ḡ ~ \*ḥ of body parts?

-r- strange]<sup>57</sup> “temple of head” [Lamberti] || LECu.: Oromo mall-a “guancia, gota” [da Thiene 1938: 234 quoted apud Lamberti] || NOM.: Kaffa mallall-o/ō “temple, osso temporale” [Cerulli 1951: 471] = “Schläfe(nknochen)” [Lamberti], Shinasha (Bworo) mālāl-á “temple of head” [Lamberti], Mocha māl-l-o “temple of head” [Leslau] | Sheko māl-l-o “temple of head (Schläfe)” [Lamberti] (NOM.-Cu.: Lamberti 1987: 533, #6.b; 1993a: 353; 1993b: 105) || CCh.: Mada mlom “tempe” [Brt. & Brunet 2000: 185].

**12.1.** Eventually perhaps akin also to SAA \* $\sqrt{\text{ml}}$ (C<sub>3</sub> = ʔ) “face” [GT]: NOM.: Kaffa male-to “faccia” [Cecchi apud Reinisch 1888: 318] || CCh.: Glavda úúmēla “cheek” [RB 1968: 96] | Hurzo mūlā “cheeks” [Rossing 1978: 223, #124: isolated in MM] | Lame mbə̀lāŋ [mb- < \*m- reg.] “côté, profil” [Sachnine 1982: 314]? Cf. Takács 2004b, 57, #346; EDE III 57-58; EAAN I 194, #939.

**13.** SAA \* $\sqrt{\text{my}}$  ~ \* $\sqrt{\text{m}}$ ? “(top of) head” [GT]: Bed. moi, pl. moia ~ moiya “1. crown of head, 2. top (tree, hill)” [Roper 1928: 213] = moi (m) “top of the head” [Hudson 1996: 89] || LECu.: Afar moyy-a (f), pl. moyyāyi “brain, head, skull” [PH 1985: 170] (Bed.-Afar: Blazek 1994 MS Bed., 28) || SCu.: Ma’a muá [muha], pl. mia “Kopf” [Meinhof 1906: 314] = muʔa “head” [Ehret 1987: 387: isolated in SCu.] || CCh.: Musgu mō [unless < \*mog] “head” [Mouchet in JI 1994 II, 183: isolated in Ch.] || ECh.: perhaps WDangla mawó “parure de tête féminine, comme deux ailes de chaque côté de la tête, en doum” [Fédry 1971: 110]. Cf. Takács 2009d: 222, #405; EDE III 144; EAAN I 201, #972.

**13.1.** Is the reduplication of this root preserved by HECu.: Kambatta mummi “1. head, 2. hair of head (human)” [Hudson l.c.], Qabenna mūmi “head” [Korhonen] = mūmmi “head” [Crass 2001: 49, #107]?

**14.** NAA \* $\sqrt{\text{bk}}$  “1. lock of hair, 2. net” [GT]: Sem.: (?) Talmudic Aram. baykā (?)<sup>58</sup> “Netz, Haarschmuck (?)” [Dalman 1922: 53] = “filet, coiffure (?)” [DRS], cf. also MHbr. būkyā “1. the weaver’s shuttle, 2. the spider” [Jastrow 1950: 145] = “1. navette de tisserand, 2. araignée” [DRS] and JAram. būkyār (formative -r) “the weaver’s clue” [Jastrow] (Sem.: DRS 62) || NEg. bkk (hair det.) “boucles de cheveux” (NK, Andreu & Cauville 1978: 13; AL 78.1379) = (plant determinative) “\*Locke, \*Haarlocke”, cf. wp.t-j hr bkk “mein Scheitel hat eine \*Haarlocke” (GHWb 264) || NBrb.: Mzab t-bušbuš-t [\*t-bučbuč-t, č reg. < \*k] “pompon, gland, noeud de laine” [Delheure 1984: 14], Wargla ta-bbuš-t [\*ta-bbuč-t, č < \*k reg.] “touffe, pompon, toupet, houppe de cheveux, flocon de laine, de soie” [Delheure 1987: 34], Shawya beč [č reg. < \*k] “poil fin des lièvres, souris, ...” [DRB 14] (NBrb.: DRB 9). Cf. EDE II 340; Takács 2009e, 322, #20; EAAN I 31, #84.

**15.** AA \* $\sqrt{\text{bkr}}$  ~ \* $\sqrt{\text{bgr}}$  “lock of hair” [GT]: Sem.: presumably JAram. būkyār (formative -r) “the weaver’s clue” [Jastrow 1950: 145] || LEg. bk3 [if < \* $\sqrt{\text{bkr}}$ ] (hair det.) “boucles (de cheveux)” (GR, Edfou IV 64, 12; AL 78.1379) || SBrb.: Hgr. ā-beggār, pl. i-beggār “1. chevelure (d’homme ou de femme) un peu longue et non tressé, 2. toute chevelure actuellement

<sup>57</sup> But -r- < \*-l- would be irreg. Perhaps -r- < \*-ll-?

<sup>58</sup> The reading and meaning of the Talmudic Aram. word are doubtful.

non tressé et longue de plus de 10 cms” [Foucauld 1951-2: 35; DRB 35: isolated] ||| LECu. \*bukur- “lock of hair” [GT]: Afar buḵūr “Haarbüschel auf dem Scheitel” [Reinisch 1886: 828] = bukkūrta “single bunch of hair left on a child’s head when shaven” [PH 1985: 74] | Somali búkur “Haarschopf der Knaben auf dem Scheitel” [Reinisch 1902: 79]. Cf. EDE II 340-341; EAAN I 32, #94. Of biconsonantal origin? Cf. AA \*√bk “hair” (supra).

**16. PAA \*√bn** “hair” [GT]: Sem.: presumably Akk. (a/jBab.) abbuttu [provided < \*abbuntu?] “eine Haartracht: ein oben zusammengebundener Schopf (?)” [AHW 5] = “1. characteristic hair style for slaves, 2. hair forming the a. lock, 3. part of the head where the a. grows, 4. a metal clasp to hold the a. lock” [CAD a 48] ||| Nom.: NWometo \*binan-a “hair” [Bender] = \*biynan- [GT]: Gofa binnân-a “capello, pello” [Moreno 1938: 139], Wolayta binnan-a [Bender], Malo binnann-a [Alemayehu] = binānn-a ~ binān-a [Bender] = binōn-a ~ binnān-a [Fleming] = binānn-a [Siebert, Candwell], Dawro and Gamu binan-a [LS], Haruro (Basketo) binan-a [Bender], Dorze biynén-a [Bender] = biynán-a [Lewis] = Kullo binen-a [Bender] = binan-a [Alemayehu] (NWometo: LS 1997: 321; Bender 1999 MS: 17, #65; 2000 MS: 57, #65) ||| Ech.: Somray bônáy “poils du pubis” [Jng. 1993 MS: 5] | Mokilko bônne (f) “poil” [Jng. 1990: 67], EDangla bínyó (f) “le poil de la crinière ou de la queue du cheval, le crin” [Dbr. & Mnt. 1973: 45]. Cf. EDE II 193-194; EAAN I 43, #154.

**17. PAA \*√br** “hair (on top of any body part, either of human or animal)” [GT]: Sem.: Ar. burʾil- “plumes fines formant le collier de certains oiseaux, et qu’ils hérissent à volonté quand ils sont excités” [BK I 117] = burʾul- “plumes fines, érectiles, du cou de certains oiseaux”, barʾala “hérissier les plumes du cou (oiseau)” [DRS 81] ||| Bed. bār “camel-hair” [Roper 1928: 162]<sup>59</sup> vs. Bed. beräre “Mähne des Löwen, Pferdes, von Pavian” [Reinisch 1895: 51] = berāri “mane” [Roper 1928: 163] || LECu.: Somali bār “langes nicht geschnitten Haar, behaarter Gipfel” [Reinisch 1902: 85] = bār “the tuft of hair on camel’s hump” [Abraham 1964: 27] = bār “hairs on the camel’s hump” [Siyad 1984: 290], Jabarti bār “der oberste Teil eines Gegenstandes”, pl. bārar “Haarhörner, aus Haaren geflochtene Hörner auf beiden Seiten des Frauenkopfes” [Reinisch 1904: 54] || SCu.: WRift \*bōr-a, pl. \*bōráy “goat’s beard” [KM] = “facial hair” [GT]: Irq. bor-i “body hair, facial hair” [Ehret] = bōr-áy (pl. m), sg. bōr-i “beard on the chin” [MQK 2002: 22] = bōr-i “goat’s beard” [KM], Gorowa bōr-a, pl. bōráy “goat’s beard” [KM], Burunge bōr-a “goat’s beard” [Ehret] (WRift: Ehret 1980: 140; Cu.: Blazek 1994 MS Bed., 9; KM 2004: 75) ||| Ech.: Somray bàrà (f) “tresse de femme, cheveux tressées” [Jng. 1993 MS: 4]. Cf. also Takács 2000: 72, #1.4; EDE II 250; EAAN I 51-52, #200. The underlying AA root might be perhaps identical with that of PAA \*√br “head, top” (above).

**18. SAA \*√bl** “mane” [GT]: LECu.: Somali búlbul ~ bábul “Mähne des Löwen, Pferdes, des Pavian” [Reinisch 1902: 82] = búlbúl “1. fleece, 2. huge shock of hair” [Abraham 1964: 35] | HECu.: perhaps Sidamo balāl-a “other hair (of adolescents)” [Hudson 1989: 352] ||| Ech.: DM \*balbal- “crinière de cheval” [GT]: WDangla bōlbāl (pl.), bōlbilo (sg., peu usité) “cri-

<sup>59</sup> Originally “\*‘‘hairy peak of camel’s hump’’”

nière de cheval” [Fédry 1971: 92], Bidiya bàlbàl (m) “crinière” [AJ 1989: 56], Migama bìlbìllé (m) “crinière” [JA 1992: 70]. Cf. the preceding entry? Cf. EDE II 249; EAAN I 67, #290.

**19. PAA \*√pš** “to comb” [GT]: Sem. \*√npš (root ext. prefix \*n-)<sup>60</sup> “1. to comb, 2. handle, arrange body hair” [GT]: Akk. napāšu “(Wolle) auszupfen” [AHW 737] = (OBab., SBab., NAss.) G and D “1. to comb and clean wool, pluck apart”, N “2. to be plucked apart” [CAD n 291] || JPArAm. √nps “to hackle, comb” [Sokoloff 1990: 356], PBHbr. √nps (Aramaism with -s) piel “schlagen (Baumwolle oder Wolle)”, nappāsā? “Wollschläger” [Dalman 1922: 274] = PBHbr. nāpas piel “(eig.: streuen, insbes.) hecheln, die Wolle ausschütteln, sie vom Staube reinigen” and JArAm. nāpas pael “hecheln, (Wolle u. dgl.) klopfen” [Levy 1924 III 422], JNArAm. √nbš (Arabism with -š?) “to card (wool, cotton)” [Sabar 2002: 229] | Ar. √nfš > I nafaša “séparer la laine, le coton avec les doigts” [BK II 1311] = “to separate (sg. not difficult to separate, such as cotton and wool), pluck asunder, loosen (with one’s fingers so that it became spread, sparse or dispersed), pull wool (until its parts became separated), pluck asunder or loosen, spread or disperse, ruffle (feathers around the neck)” [Lane 2829-2830] = “carder la laine, tiller, détacher l’écorce du chanvre, érailler (des étoffes), se nettoyer la barbe, en ôter la poussière, hérissier, retaper, peigner à rebours les cheveux et les enfler” [Dozy II 702],<sup>61</sup> Dathina √nfš “délrier (les cheveux)” [GD 2807] = unloosen the hair” [Leslau] || ES: Tigre √nfš: nāfša “to card wool, unloosen the hair” [LH 347 apud Leslau 1982: 55: borrowed from Dathina] || Eg. pšj (f) “Substantiv” (NE, Wb I 560, 2) = “peigne” (AL 79.1049 after Zonhoven in JEA 65, 96, n. 65) = “divider, comb” (DLE I 184) = “Kamm (aus Elfenbein)” (GHWb 296) = “Kamm” (Quack 1997: 331 based on Janssen, JEA 50, 1964: 178f.) || NBrb. \*√fsw “carder, défaire, étirer, peigner etc. (la laine)” [GT after DRB 656] || WCh.: Hausa fíříří “dressing woman’s hair” [Abr. 1962: 269] | AS \*pās “to comb, card” [GT]: Angas pēs (Kabwir dial.) “rupfen (z.B. die Federn des Huhnes)” [Jng. 1962 MS: 32] = pes “to thin, comb” [ALC 1978: 51], Mupun pās “to comb hair” [Frj. 1991: 47], Kofyar paas “to comb” [Netting 1967: 31], Goemay paas` [pās] “to clear, make a clearance through”, cf. paas dang goeřing “to clear a horse’s tail from entangled dirt by passing the hands through it” [Sirlinger 1937: 171] (AS: Takács 2004a, 282). The Ar.-Mupun comparison was first suggested by O. V. Stolbova (HSED 412, #1918; Stolbova 1996: 121), while the Eg.-AA one by G. Takács (2005d, 209-210, #300; EDE II 520; EAAN I 78, #358).

**20. (N<sup>2</sup>)AA \*√fr** “hair” [GT]: Sem. \*par<sup>c</sup>- “capelli fluenti” [Fronzaroli] = \*par(a)<sup>c</sup>- “hair (on top of the head)” [Belova et al. 1994 MS: #77] = \*par<sup>c</sup>- “(loose) hair of the head” [SED]:<sup>62</sup> Akk. pērtu ~ pēretu “Haupthaar” [AHW 856] = pirtu “Haupthaar” [Holma 1911:

<sup>60</sup> The fact of its being prefixed by \*n- has already been admitted by V.E. Orel & O.V. Stolbova (HSED 412, #1918). Perhaps of a reflexive meaning?

<sup>61</sup> Ch. Ehret (1989: 183, #58) derived Ar. √nfš “to pick wool or cotton, pluck” from his alleged biradical Sem. \*√np- “to come out”, which hardly agrees with the AA evidence. V.E. Orel & O.V. Stolbova (HSED 412, #1918), in turn, reconstructed a certain PSem. \*nVpuš- “to separate wool with fingers, card” solely from the Arabic reflex and assumed an eventual cognacy of their underlying AA \*pač- “to card, comb” to their AA \*pVč- “to distribute, divide”.

<sup>62</sup> The inner Sem. etymology (if any) of Sem. \*par<sup>c</sup>- has been debated. It is also uncertain whether the Sem. etymon is connected to Sem. \*√pr<sup>c</sup> “to grow” (as maintained in GB 660; Fronzaroli 1964: 268, #2.46; WUS #2277). S. D. Ricks (1982: 298), in turn, associated Hbr. pera<sup>c</sup> with OSA: Qatabanian fr<sup>c</sup>-m “top, summit of”, Ar.

34] = pirtu “Kopfhaar” [Torczyner 1912: 770]<sup>63</sup> || Hbr. pera<sup>c</sup> “das volle Haupthaar” [GB 660] = “loosely hanging and unplaited hair on the head” [KB 970] | Ar. far<sup>c</sup>- “das volle Haupthaar” [GB] = “chevelure” [BK II 579] = “космы волос” [SISAJa] (Sem.: Holma 1911: 34; Fronzaroli 1964: 268, #2.46; SISAJa I, #46; Belova 1992: 16; SED I 192, #218) || perhaps LEg. f<sup>c</sup>(3) ~ f<sup>c</sup>j [if metathesis < \*f3<sup>c</sup> < \*√fr<sup>c</sup>]<sup>64</sup> (hair det.) “lock of hair” (NE, pap. Turin 1983, vo. I 47-48, Černý 1958: 210, #6 after I. E. S. Edwards) = “cheveux” (AL 77.1544) = “lock of hair” (DLE I 190) = “Haarlocke” (GHWb 305)<sup>65</sup> > Dem. f<sup>c</sup> ~ f<sup>c</sup>j ~ fj “Haar” (DG 144:4) → Coptic (OSF) ϣω, (S) βω ~ ογω, (SBL) ϣωε, (A) βωε, (AL) ϣογε, (M) ϣοε, (BF) ϣωι, (F) βωωι ~ ϣωογ “hair” (CD 623a; CED 265; KHW 345) || NBrb.: Mzab tu-frə-t, pl. tu-fra-t-in “mèche bouclée de cheveux” [Delheure 1984: 50] || EBrb.: Ghadames ta-frī-t, pl. ta-fra-t-īn “1. mèche de cheveux qui s’arrondit sur le front, 2. languette de chausson ou de chaussure qui recouvre le dessus du pied, ornée ou non de broderies de soie” [Lanfry 1973: 94, #140] || LECu.: cf. perhaps Afar būr<sup>c</sup>-i [irreg. b- < AA \*f-] “tight wooly hair (like that of a negro)” [PH 1985: 74] || CCh.: Lame pēr “favoris, poils du visage” [Sachnne 1982: 268]. For this AA etymology cf. also EDE II 564-565; Takács 2003c: 191-192, #315; EAAN I 105, #501.

**20.1.** Any connection to Sem.: Ar. ʿufr-at- “2. crinière (du lion), long poil du cou (qui se hérissent chez certains animaux, quand ils sont en colère), 3. plumes du cou du coq (qui se dressent quand il est irrité)”, ʿifr-āt- “cheveux du milieu de la tête”, ʿafr-an “1. plumes du cou chez le coq (qui se dressent quand et s’ébouriffent quand il est irrité), 2. cheveux du derrière ou du sommet de la tête (chez l’homme), 3. toupet, crins ou poils qui descendent sur le front (chez les bestiaux)” [BK II 297-298] || ECu.: Dullay: Gollango ufur-kó “Körperhaar” [AMS 1980: 246] as suggested by A. G. Belova (1992: 16; 1998: 14)?

**21. AA** \*√my ~ \*√m? “hair” [GT]: Eg. mjw (or mj.w?) “Frisur” (late NK, Wb II 42, 10; GHWb 325) || SCu. \*mu?- “hair (?)” [GT]: Burunge muʔu “chaff, grain husks” [Ehret] | Ma’a mamuʔu “wool, fur” [Ehret 1974 MS: 46] = “plummage, fur” [Ehret 1980] (SCu.: Ehret 1980: 160, #54) || CCh.: perhaps Higi mʔa “beard” [Mohrlang 1972: 102] || ECh.: EDangla màyā “charganier tressé de façon ordinaire” [Dbr. & Mnt. 1973: 199]. Ultimately connected with SAA \*√my ~ \*√m? “(top of) head” [GT] (discussed above in the entry no. 12)? Is the reduplication of this root preserved by HECu.: Kambatta mummi “2. hair of head

far<sup>c</sup>- “top”, fara<sup>c</sup>a “to excel”, which is similarly dubious. The Russian linguists (SISAJa I, #46) equated, besides, Sem. \*par<sup>c</sup>- with SBrb.: Hgr. ā-bēggūr “long disbanded hair”. Rejected by G. Takács (1999a: 20) for phonological reasons (Eg. f- ≠ Hgr. b-, while the suggested change of Hgr. -gg- < \*-ww- is not justified).

<sup>63</sup> If Akk. pirtu “Kopfhaar” is to be linked to Ar. farw-at- “Kopfhaut samt Haaren” (as suggested in Torczyner 1912: 770), it should be excluded from this AA root.

<sup>64</sup> Can be read either f3<sup>c</sup> or f<sup>c</sup> (GW). Cannot be certainly decided whether the final -3 was purely orthographic due to the group-wtg. The suggested Afro-Asiatic etymology of the word indicate that the OEg. root was either \*f3<sup>c</sup> < \*f3<sup>c</sup> (met.) or \*f<sup>c</sup> < \*f3<sup>c</sup> (“lost” -3-).

<sup>65</sup> S. Sauneron (1964: 20) pointed out the word for GR, namely in the Abaton Decree, which prohibited to approach the holy place for z nb hr f<sup>c</sup> “everyone with hair”. Beside this occurrence, Sauneron (1966: 10) proved the phonetic value f of the hair hieroglyph in Esna (GR), supposedly created on the basis of the acrophonic principle from LEg. f<sup>c</sup> “hair”.

(human)” [Hudson 1989: 75: isolated in HECu.] = mūmmi “hair (of head)” [Wedekind 1990: 673, #35]? Cf. EDE III 144; EAAN I 201, #973 with further discussion.

**22. PAA \*√PS** “front” [GT] stands for a whole root family reconstructible from diverse varieties with changing C1 or C2 (voiceless or voiced, resp.):<sup>66</sup>

**22.1. SAA \*√bc** (var. \*√bç?) “front” [GT]<sup>67</sup> > ES \*√bsw [DRS, GT: < NOm.?]: Tigre bəsot “front” [DRS 72: isolated in Sem.] ||l NAgaw: Bilin besôt “die Stirn” [Reinisch 1904: 55] = bisot “forehead” [Apl. 1991b MS: 6] || LECu.: Saho baso (m), pl. basos “forehead (fronte)”, baso-dde, baso-lle “before (prima di)” [Vergari 2003: 54], Afar bas-o “forehead (front)” [PH 1985: 69 quoted also by Ehret],<sup>68</sup> Somali-Jäbärti basá “Stirn” [Reinisch 1904: 55] || SCu. \*bac- [-ts-] “face, forehead” [GT] = \*baṭa- “face, forehead” [Ehret]: Ma’a (Mbugu) bāsō “Stirn” [Meinhof 1906: 308]<sup>69</sup> = vu-basá [Ehret, Fleming] (SCu.: Ehret 1980: 133, §I.A.4) ||l NOm.: Gimira bās “guancia” [CR 1925: 619] = bas “cheek” [Fleming] (NOm.-Ma’a: Fleming 1969: 25) ||l WCh.: Bokkos ḥos, pl. ḥosas “Stirn” [Jng. 1970: 140] || CCh.: Kotoko (Logone) būsá “visage” [Bouny & Jouannet 1978: 186], Buduma bahú [h < \*s reg.] “1. Stirn, 2. vorwärts”, behá “Stirn, Gesicht” [Nachtigal in Lukas 1939: 91]. SCu.-Somali-Bench-Bokkos-Musgu: Takacs 2000: 74, #1.10.

**22.2. SAA \*√bc** “to go in front of, before, first” [GT] > LECu.: Saho bas-ō “passato” [Cerulli] = bas-ō “die Vergangenheit” [Reinisch] = bas-o “die Vergangenheit” [Lamberti] = basō “past (passato)”, basoh “once, already” [Vergari 2003: 54], Afar bos-ō ~ bis-ō “passato”, bos-ō-l “anticamente” [Cerulli] = bis-o “Vorderstellung, vorne” [Lamberti] | HECu.: Sidamo baš-ō “prima, anticamente” [Cerulli] = bašš-o “former/past times” [Hudson 1989: 353: isolated in HECu.] = bašš-o “before, in the past” [Ehret 1991: 232]<sup>70</sup> = bašš-o “früher, in der Vergangenheit” [Lamberti] || SCu. \*bac- [-ts-] “to go first, in front” [GT] = \*bāṭ- “to go first, anticipate, forestall” [Ehret]: Alg. bac- [-ts-] “to start off” | Asa piṣ-at- “to go first, anticipate, forestall” | Ma’a bosí “beginning” (SCu.: Ehret 1980: 133, §I.A.3)<sup>71</sup> ||l NOm.: Kefoid \*beš- “to proceed, precede” [GT] (ECu.-Om.: Cerulli 1938 II 195 and 1951 IV, 416; Lamberti 1993a: 288). See also Takacs 2011b: 187, #12 for the roots treated here under the entries no. 21.1 and 21.2.

**22.3. PAA \*√ps** “front part, face” [GT] > EBrb.: Audjila a-fiš, pl. fiš-âw-en “viso” [Paradisi 1960: 177] = a-fiš (-c), pl. fiš-aw-en “visage” [DRB 519, FC7: isolated in Brb.] ||l WCh.

<sup>66</sup> Which will be comprehensively examined by the present author sub entry no. 247 in his forthc. paper “Omotic lexicon in its Afro-Asiatic setting VIII: Further addenda to Omotic roots with \*b- + sibilants”.

<sup>67</sup> Any connection to NOm.: Gimira (Benesho) bās “guancia” [CR 1925: 619] = bas “top” [Wedekind 1990: 99]?

<sup>68</sup> Equated by Ch. Ehret (1991: 232) directly with HECu.: Sidamo bašš-o “before, in the past” < ECU. \*b/ḥac- “front”. In Ehret 2000 MS: 15, #1091, in turn, the Afar word was set in the context of Sem.: Ar. busūq- “to be high, surpass” and NOm.: Gimirra-Benesho bas<sup>2</sup> “(on) top” < AA \*bās- “top”.

<sup>69</sup> C. Meinhof (l.c.): “vgl. Duala *boso*, Swahili *uso* ‘Gesicht’”.

<sup>70</sup> Ehret (1991: 232): ~ HECu.: Sidamo bašš-o “before, in the past” < ECU. \*b/ḥac- “front”.

<sup>71</sup> Ehret l.c.: cf. also Iraqw bac- [-ts-] “to lay aside, save for future” [Ehret 1980: 133] treated here as a distinct root.

\*pus-k- (suffix \*-k- of anatomical terms)<sup>72</sup> “face” [GT]:<sup>73</sup> Hausa *fískà ~ fúskà* “face” [Abraham 1962: 269], Gwandara *píska ~ píšíka ~ púska* [irreg. p-] “face” [Matsushita 1972:

<sup>72</sup> Its C<sub>3</sub> \*-k- originally was not part the root. The traces of a CAA \*-k body part suffix are found both in Egyptian and Chadic. Listing examples from Dera and Hausa, P. Newman (1970: 48, fn. 27) has already concluded to identifying in WCh. a \*-k “non-productive body part suffix”, which – in the light of further exx. from other Chadic branches – certainly derives from PCh. \*-k [GT]. Cf., e.g.: ● **1. Eg. *snk* (< \*sl-k)** “Bez. für die Zunge (mit der die göttliche Kuh Hathor das Königskind leckt)” (XVIII. old text, Wb IV 177, 1) = “Zunge (der göttlichen Kuh Hathor)” (GHWb 724), cf. Eg. *sn.w* [< \*√sn or \*√sl] “Zunge” (GR, Wb IV 155, 15). The Eg. root is cognate either with Ch. \*√sl “tongue” [GT] or Ch. \*√sn “tongue” [GT] (Ch. data: JI 1994 II 328-329). ● **2. Eg. *sn̩t*** [from \*sl-k] “Leib, Glieder” (NK, Wb IV 180, 1), cf. *sn̩t.jt* (coll.) “Leichname (im Jenseits)” (NK, GHWb 725) || Sem. \*šily-at- “placenta, uterus” [Fronzaroli 1964: 262-263] || HECu.: Burji *sæ’lay* “belly” [Bender 1971: 245] = *sal-áy* “belly” [Sasse] | Dullay: Harso *sālas̩h-te* [partial reduplication + ext. \*h of body parts] “Magen” [AMS 1980: 183] (ECu.: Sasse 1982: 163) || NOM.: She *šil* & Benesho *šil’* “belly” [Bender 1971: 260-261, #4]. See Blažek 1989 MS Om.: 8, #15 (She-ECu.-Sem.). ● **3. Hausa *bààkíf*** “1. mouth, 2. opening, 3. entrance” [Abr. 1962: 62] | Dera bok “mouth” [Newman] < PCh. \*b- “mouth” [GT], cf., e.g. WCh.. Karekare *bò* “1. Mund, 2. Öffnung, 3. Rand” [Lukas 1966: 199] | Guruntum *b’au* “1. mouth, 2. language” [Jaggar 1989: 186], Ngamo *bo* “mouth” [Newman 1965: 58] || ECh.: Somray *bi* “bouche” [Jng. 1993 MS: 6] | Migama *bíi*, pl. *bèné* “1. bouche, 2. lèvres” [JA 1992: 70] | Birgit *bi* “bouche” [Jng. 1973 MS], Jegu *bèetó* “mouth” [Jng. 1961: 110] || NBrb.: Mzab *baḥa* & Wargla *beḥḥa* [suffix \*-h of body parts] “bouche” [DRB I 42 pace Delheure]. Already H. Jungraithmayr and D. Ibriszimow have rightly stated (1994 I 122) about \*-k in this Common Chadic root: “In the light of this HS evidence the assumption of a Chadic -k suffix (‘body part’ morpheme) in our root A [PCh. \*b-k] seems to be justified”. ● **4. WCh. \*ži-(k)-** [GT]: Hausa *žikíf* “body” [Abr. 1962: 427] | Dera *yik* [y < \*s] “body” [Newman], cf. WCh. \*Z/Si “body” [GT]: Sura *s-* [Jng.] | Geruma *žif* [Schuh], Kirfi *ži* [Schuh], Galambu *ži* [Alio] | Zaar *ži* [Shimizu] || ECh.: Kwang-Mobu *sī* [Jng.] | Somray *sí*: [Jng.] | WDangla *zì*, Migama *zì*: [Jng.] | Birgit *zì* [Jng.] (Ch.: JI 1994 II 34-35). ● **5. WCh.: Dera *kuyuk* < \*kusu-k** [y < \*s] “excrement” [Newman] | Hausa *kāášif* “excrement” [Abr. 1962: 498], Gwandara *kwaši* “excrement, faeces” [Matsushita 1972: 73] || ECh. \*kVsi “faeces” [GT]: Kwang *kūsi(ny)* [Jng.], Kera *kusi* “Kot / fèces, selles” [Ebert 1976: 75] | Kabalay *kasí* [Caprile], Lele *kāšiyā* [Gowers] (Ch.: JI 1994 II 128-129) || Sem.: Ar. *ḡa’s-* “excrement” [Dillmann apud Leslau] || ES: Geez *kā’sē* “excrement, dung, contents of the stomach”, Tigre *kā’as* “broken meat in an animal’s stomach”, Tigre *ka’še*, *kā’aše* and Tigrinya *ka’si* “animal’s stomach”, Amh. *kwəs*, *kus* “excrement (usually of fowl)” (ES/Sem-Cu.: Leslau 1987: 272) || Nagaw (borrowed from ES): Bilin *ka’ad*, pl. *kā’as* “contents of the stomach, excrement” [Leslau] || HECu. (borrowed from ES): Burji *k(w)ošē* “(dry) dung (of cattle)”, *kosē* “dung (of cattle)” [Hudson 1989: 54: isolated in HECu.]. Hausa/Gwandara-Geez (with a number of false comparanda): Skinner 1992: 348; 1995: 94. Root var. with \*k- in Sem.: Ar. *qaš’-* and *qiš’-* “1. ordures de bains que l’on jette dehors”, biradical: *qašāš-* “ordures ou morceaux ramassés par terre ou dans un fumier”, cf. *qašš-* “frôlement de la peau” [BK II 742, 740] || SBrb.: EWlmd.-Ayr *te-yašās-t* “engrais, fumier (surtout fumier)” [PAM 2003: 307]. ● **6. WCh.: Dera *lašik*** “vomit” [Newman] || Eg. *šš* [regular < \*lš] “(Opfergabe) ausspeien (bildlich vom Nil)” (XX., Wb I 21, 1) = “aus-speien” (GHWb: 15) < AA \*√lš [GT]. ● **7. WCh.: Dera *yilik* < \*sili-k** [y < \*s] “tongue” [Newman] || CCh.: Zime-Dari *šilli* [Strümpell], Zime-Batna *silé* [Jng.] = *sīlī* [Sachnine] || ECh.: Kera *kə-səl* [Ebert] | Sokoro *sólañd-* [Nachtigal] = *selindu* [AF] = *sélén* [Saxon] (Ch.: JI 1994 II 329) | PCh. \*√sl “tongue” [GT]. The same suffixation is present in Eg. *snk* vs. *sn.w* (see above). ● **8. WCh.: Dera *yilek* < \*sile-k (?)** [y < \*s?] “saliva” [Newman] || CCh.: Buduma *člulú* [Nct.] = *čilulú* “saliva” [Cyffer] || Bed. *sil* “Speichel, Geifer” [Reinisch 1895: 198]. Alternatively, if Dera *y-* developed unchanged < \*y- (equally plausible) in this case (i.e. \*yile-k), cp. alternatively WCh.: Bole *ʔyúlē* [Ibriszimow] || ECh.: Migama *ʔóló* (pl.) [JA 1992: 113], Bidiya *ʔūlā*, pl. *ʔūlay* [AJ 1989: 122] – all “saliva” (Ch.: JI 1994 II: 278-279). ● **9. CCh.: Tera *kopa-h*** [-h < \*k] “wing” [NM 1966: 240; Newman 1977: 34 with a different etymology] || WCh.: (?) Angas-Sura *\*č(ʔ)āz̩p* [\*čʔ- < \*k-ʔ] “wing” [GT 2004: 57] || NOM.: POMeto *\*kEp-* “wing” [Bender 1988] = *\*kep-e* “wing” [Bender 2003: 123, #148] | Mao *\*kwāp-* “arm, wing” [GT]: Mao (sic) *kefe* “wing” [Fleming], Mao-Bambeshi *kwāpe* “wing, upper arm” [Bender] = *kwāpe* (sic: kw-) “wing” [Wedekind], Mao-Diddesa *kap kwīnte* “feather” [Fleming 1990: 27] (Mao: Bender 2003: 282, #148; NOM.: Bender 1988: 146) || SOM.: Aroid *\*kāf-* “wing” [Bender 2003: 220, #148]: Ari *kefī* “feather, wing” [Grottanelli apud Bender 2003: 209, #49], Galila *kāfi* “wing” [Fleming 1976: 321]. ● **10. ECh.: Bidiya *buski* < \*bus-k** “blood” [AJ 1989: 61] akin to Mokilko *pùüzó* “blood” [Jng.] || CCh. \*√bs “blood” [GT]: Nzangi *bisé*

96] | Warji pusk- “face” [Skinner] | Ngizim fəskâ, pl. fəskakín “face” [BYAG 2004: 33], Bedde (sic) puksan “face” [Skinner] = WBade puksan “forehead” [Dagona 2004: 67], Gashua Bade puksâ “face, forehead” [Tarbutu 2004: 60] (WCh.: Skinner 1996: 71) || CCh.: (?) Buduma p<sup>h</sup>ahá, pl. p<sup>h</sup>ehaē [-h- regular < \*-s-, but p<sup>h</sup>- < \*b- obscure] “Stirn, Gesicht”, p<sup>h</sup>ohó “der erste, voran, zuvor” [Nachtigal apud Lukas 1939: 91, 124]. Cf. also CCh.: Musgu galé-ku (deine Wange) pópeše “Schläfe” [Lukas 1941: 73]?

**22.4. AA \* $\sqrt{b\check{z}(w)}$  “face” [GT]:** EBrb.: Audjila a-bžâu, pl. bžâw-en “guancia” [Paradisi 1960: 167], Ghadames ta-bažžuḥ-t<sup>74</sup> “partie antérieure de la tête au dessus du front” [Lanfry 1973: 8, #45; DRB 44: isolated in Brb.] || SCu.: ERift \*baža- “face, forehead” [Ehret]: Qwadza bažawa (-dz-) “face” [Ehret 1980 MS: 1], Asa paža (-j-) “face, forehead” [Ehret] (SCu.: Ehret 1980: 133, §I.A.4) || NOm.: Zayse bāz-ō “fronte” [Cerulli 1938 III 201] = baz-o “forehead” [Fleming 1969: 25].

**22.5. P<sup>2</sup>AA \* $\sqrt{bS}$  “an organ on the front part of the human body” [GT]:** NBrb. \*ta-bbi/uš-t “1. sein, mamelle, 2. pénis, verge, 3. vulve, vagine” [GT pace DRB 8-9, BC2] || NAgaw: Qwara (Falashan) baži “poitrine” [Lefèbvre apud Reinisch] = bāč (-tsh) “breast” [Flad apud Reinisch and Apl.] = bāž (-j) “Brust” [Reinisch] = baž “breast” [Apl. 1996: 13]. Whether represent the very same root from a primary sense \**“front part”*, should be further examined. Note that Brb. \*-š(š)- vs. \*-z- may be allophones. Both H.C. Fleming and Ch. Ehret (l.c.) identified the Zayse and the East Rift, resp., forms with some of the varieties with a voiceless C<sub>2</sub> listed above:

**23. S/P<sup>2</sup>AA \* $\sqrt{Pnd}$  “front” [GT]:** only (???) reconstructible from NBrb.: Tamazight bnid (prononc. plus fréquente) ~/> (?) mnid “devant, en face (de)” [Taïfi 1991: 21 and 422; DRB 75, BND7: isolated in Brb.] || SCu.: WRift \*pānda (f), pl. \*pāndadu “face, forehead” [KM]<sup>75</sup> > Iraqw panda “abnormal backward extension of skull” [Ehret] = pānda (f), pl. pāndu “top

[Strümpell] = bize [Meek] = bízē [Mouchet] | Hitkala(nci) (Lamang) ùbəsì [Lukas], Hitkala (Waga dialect) ubis [Meek] | Masa bóswo [Mouchet] = búsu:ná [Jng.] (Ch.: JI 1994 II: 30-31). Outside Chadic, this root seems to survive in the form of PAA \* $\sqrt{bs}$  “to bleed by wounding” [GT] > SBrb.: Ahaggar buys “être blessé (avec écoulement de sang)” etc. [Foucauld], Ghat buys “être blessé”, a-buys “blessure, lésion”, pl. “aie” [Nehilil], EWlmd.-Ayr busu “être blessé”, EWlmd. a-bus “blessure, plaie” [PAM 2003: 51] (SBrb.: DRB 129: 146) || HECu.: Sidamo bass-a “scar, sore, wound” [Hudson 1989: 353: isolated] || WCh.: PDangla \*bēs- “to scar” [GT]: WDangla bèèsè “faire une coupure de la peau au couteau” [Fédry 1971: 86], EDangla bésé “1. scarifier, faire une entaille dans la chair, 2. saigner, faire une saignée, vacciner (soins médicaux traditionnels ou modernes); 3. faire des cicatrices ornementales, tatouer, balafrer” [Dbr.-Mnt. 1973: 43], Korlongo béésé “scarifier” [Dbr.-Mnt.]. Cf. also (as a root variety with lateral C<sub>2</sub>) the isogloss of HECu. \*bīšš-a “red, brown” [GT pace Leslau], borrowed by ES: Gurage (Chaha, Ennemor, Gyeto) bāša, (Ezha, Muher, Mäsqān, Goggot, Soddo) bāšša, (Endegeny, Selti, Wolane) bušā “red, brown (cattle), \*light coloured (man)” [Leslau 1979 III 161] || SCu.: WRift \*buči (-tl-) “blood-red” [KM]: Alagwa buč (-tl-) Burunge buči (-tl-) (WRift: KM 2004: 77) < PCu. \* $\sqrt{b\check{e}}$  “red” [GT].

<sup>73</sup> N. Skinner (1996: 71) envisaged a fossilized compound in this stem: < \*pu “mouth” + \*k (plus) + \*san “nose”, i.e., \**“mouth plus nose”*, which he affiliated with a number of phonologically unrelated parallels.

<sup>74</sup> Extended by the common AA marker of the nominal class of anatomical terms \* $\sqrt{h}$  (cf. Takacs 1997c).

<sup>75</sup> Affiliated by Ch. Ehret (1980: 339, #I.A.2) with ERift: Asa pande-k “knife” < PRift \*pand- “prominence, protuberance, projecting surface or point”. His argument as for the semantics was: “derivation: via an intermediate specification of the root to apply to a particular kind of projection, the blade or point of a weapon.” At any rate, Ehret’s equation with is semantically weak and makes the attestation elsewhere in SCu. more than dubious.

of head, high forehead” [KM], Gorowa pānda (f), pl. pānddu? “high forehead” [KM], Alagwa panda “1. forehead, face, 2. in front” [Ehret] = pānda (f), pl. pāndadu “face, forehead” [KM], Burunge panda “1. forehead, face, 2. in front” [Ehret] = pānda (f), pl. pāndadu “face, forehead” [KM] (WRift: KM 2004: 223) ||l WCh.: Ngizim ɓàndú “1. to begin, start, 2. be the first one to do, 3. do first” [Schuh 1981: 29].<sup>76</sup>

**23.1.** It is, of course, quite natural to assume here an C<sub>3</sub> root extension of PAA \*√Pn “front” [GT] > Sem. \*panw- “faccia” [Frz.] = \*pan- “face” [SED] (Sem.: Fronzaroli 1964: 269, #2.48; Leslau 1945: 234; SED I 189-190, #215) ||l SAgaw: Awngi fán “face” [Hetzron 1967: 173] = fení ~ fen “faccia, fronte, aspetto” [CR 1905: 157] = fūni “faccia”, fūnoa “prima” [Waldmeyer apud CR] = feni “Gesicht” [Müller] = fén “face” [Ehret] ||l WCh.: Bokkos fun “anfangen, beginnen” [Jng. 1970: 141] ||l CCh.: Muktele pàǵáw “cheek” [Rossing 1978: 223, #124] ||l ECh.: Kera pónáy “temple (Schläfe)” [Ebert 1976: 88] | Mokilko pòoné “1. (adv.) (l’)avant, 2. le/a premie/èr(e)” [Jng. 1990: 163]. See also Dlg. 1973: 45 (Awngi-WRift-Sem.); Müller 1975: 64, #9 (Sem.-Awngi); HSED #1943 (Sem.-Awngi-WRift); Ehret 1997 MS: 35, #1156 (Sem.-Awngi); SED I 189-190, #215 (Sem.-Awngi-WRift-Kera).

**24. AA \*√mT** (vars. \*√md ~ \*√mt) “part of the face: cheek, temple” [GT]: NBrb.: Mzg. i-mṭṭṭu “tempe” [Taifi 1991: 445]<sup>77</sup> ||l SBrb.: Hgr. é-meḍ, pl. i-meḍḍ-en “tempe et région zigomatique: tempe et partie de la joue qui est immédiatement audessus de la tempe entre la pommette et l’oreille” [Foucauld 1950-1: 1163], EWlmd. and Ayr a-mḍəḍ, pl. i-māḍḍ-ān “1. tempe, 2. (p. ext.) tempe + partie immédiatement au-dessous de la tempe (jusqu’à la pommette), 3. joue entière (y compris la pommette et la tempe), côté de la tête (ensemble de l’asməṭ et de l’əgiz)” [PAM 1998: 210; 2003: 524] ||l LECu.: Oromo madd-ī “cheek” [Gragg 1982: 273; Hudson 1989: 39], Oromo (Borana, Orma dialects) madd-ī “the cheeks, temples” [Stroemer 1987: 362] ||l CCh.: Muyang a-miḍ “chin” [Rossing 1978: 225, #131] < CCh. \*√md “chin” [JS 1981: 70B]. Irregular alternation of -d- ~ -ḍ-. See EAAN I 131, #644.

**25. AA \*√mK**<sup>78</sup> “part of the face between cheek and jaw” [GT]: NBrb.: Qabyle a-mayeg, pl. i-muyag “un côté du visage, joue et mâchoire” [Dallet 1982: 528] ||l NAgaw: Hamir miḵəḵ “chin” [BSW 1995: 4] ||l HECu.: Kambatta mōki (-ta) “cheek” [Hudson 1989: 333]<sup>79</sup> ||l WCh.: Hausa mùḵààmùḵí ~ múmmùḵè “lower jaw”, pl. mùḵààmùḵáí “the upper and lower jaws” [Abr. 1962: 682]. See EAAN I 154, #763.

<sup>76</sup> Equated by Ch. Ehret (2000 MS: 468, #3166) with an alleged PSem. \*√bn “to imitate” < AA \*-pā/aN- “to be first”.

<sup>77</sup> The derivation of the Mzg. form from i-meṭṭi “larme” (Taifi l.c.) may be rather merely a *Volksetymologie*.

<sup>78</sup> The second PAA radical is not yet clear. The data from three various AA branches point to three various PAA phonemes: AA \*-g (NBrb.) vs. AA \*-k (HECu.) vs. \*-ḵ (Hausa).

<sup>79</sup> Due to phonological reasons, Kambatta mōki cannot be a reflex of HECu. \*boḵ-o (Kambatta m- ≠ HECu. \*b-, while Kambatta -k- ≠ HECu. \*-ḵ-).

## Neck

**26. AA** \* $\sqrt{b}k$  (perhaps var. \* $\sqrt{b}q$ ?) “1. neck, throat, hence: 2. stubborn”<sup>80</sup> [GT]: Sem.: (?) Ar.  $\sqrt{b}q$  I and II “2. égorger (un chameau)”<sup>81</sup> [BK I 143], cf. perhaps also Ar.  $bah\dot{a}^{\circ}a$ <sup>82</sup> I “1. égorger un mouton de manière que le couteau traverse tout le cou jusqu’à la nuque” [BK I 91] = “trancher la gorge (d’un animal, jusqu’au vaseau dit *biḥâ*)” [DAFA = Blachère 1967 I 412] || Eg.  $bqbw$  “recalcitrance” (Lit. MK, FD 85) = “\*Aufsässigkeit” (GHWb 262) || LECu.: Oromo  $boqq-\bar{u}$  “1. neck, 2. back of neck, 3. stubborn” [Gragg 1982: 59] || WCh.: Hausa  $bágá$  [irreg. -g- < \*-k-?] “2-3. stubborn(ness)” [Abraham 1962: 57] | AS \* $\dot{b}ak \sim \dot{b}ok$  “stubborn” [GT]: Angas  $bök$  (hill) “repentance” [Foulkes 1915: 150], Goemay  $\dot{b}ak-pe$  “to be stubborn (of children)” [Hellwig 2000 MS: 2] (AS: Takács 2004: 24) | Fyer  $\dot{b}ag\dot{y}i$ , pl.  $\dot{b}ag\dot{y}i$  “neck (Hals, Nacken)” [Jng. 1968: 7, #50; 1970: 84, cf. JI 1994 II, 252]. Cf. EDE II 94; EAAN I 30, #78.

**27. AA** \* $\sqrt{m}l$  ~ \* $\sqrt{ml}$  [°] “dewlap on neck (?)” [GT]: SBrb.: EWlmd.  $t\dot{a}-mala$ , pl.  $\dot{s}i-mal-iw-en$ , Ayr  $t\dot{a}-nala$  “appendice charnu mobile (voile du apalis?) qui se trouve dans la bouche du chameau entier et qui se gonfle et sort au moment du rugissement (indice de rut ou colère)” [PAM 2003: 537] || LECu. \* $ma^{\circ}al-$  [ext. \*-°- of anatomical terms?] “dewlap” [GT]:<sup>83</sup> Oromo  $m\dot{a}la$  “Kropf, dicker Hals usw.” [Reinisch] =  $malla$  (sic, -ll-) [Ehret 1974a: 89] = (Borana, Orma, Waata dialects.)  $m\dot{a}la$  (f) “dewlap” [Stroemer 1987: 361; 1995: 206], Somali  $m\dot{a}^{\circ}al$  [Ibrahim] ~  $m\dot{a}l$  [Reinisch] “1. Wamme, Wampe, Koderlappen unter dem Kinn des Schafes und Rindes, 2. Kropf, dicker Hals und Struma” [Reinisch 1902: 282, 294] =  $m\dot{a}^{\circ}ál$  “dewlap of sheep” [Abraham 1964: 168], Arbore  $me^{\circ}el$  (f) “dewlap” [Hayward 1984: 384] || WCh.: Hausa  $m\dot{a}l\acute{o}l\acute{o}$  “1. goitre, wen on throat, 2. fatness on throat of young animals denoting good health, 3. bird’s crop” and even  $m\dot{a}l\acute{a}l\acute{a}$  “type of satchel” [Abraham 1962: 649, 652] =  $m\dot{a}l\acute{o}l\acute{o}$  “Geschwulst” (sic) [Drexel 1925: 14] || CCh.: (???) Uldeme  $m\dot{o}m\dot{a}l\acute{o}$  [unless -l- < \*-r-] “gorge” [Mouchet 1953: 168] =  $m\dot{a}m\dot{a}l\acute{o}$  “gorge” [Colombel 1997: 199]. Cf. EDE III 401-402; EAAN I 160-161, #792.

**28. AA** \* $\sqrt{mr}$  “neck, throat” [GT]: Sem.:<sup>84</sup> Ar.  $\dot{m}ar\dot{r}\dot{a}-at-$  “oesophage” <  $m\dot{a}r\dot{a}^{\circ}a$  I “2. manger qqch.” [BK II 1086] and Ar.  $m\dot{a}r\dot{r}\dot{a}-$  “oesophage, conduit alimentaire” [Dozy II 577], Yemeni Ar.  $m\dot{a}r\dot{r}\dot{a}$  “gullet”, cf.  $\sqrt{mr}$  II “to whet an appetite” [Piamenta 1990: 463] || Eg.

<sup>80</sup> This second sense can be reconstructed for the PAA level from the Egyptian, Oromo, and Hausa reflexes. For the semantic shift (attested with both senses in Oromo), cf. also, e.g., Hungarian  $nyakas$  “stubborn”, an adjective <  $nyak$  “neck”.

<sup>81</sup> Denominative verb? Infix \*-°- of anatomical terms?

<sup>82</sup> It may only be related provided its alleged connection with (as denominative verb from) Ar.  $biḥ\dot{a}^{\circ}$  “veine qui traverse le long du dos et vas jusqu’aux os de la nuque” [BK I 91, so also DRS 58: isolated in Sem.] = “veine jugulaire postérieure (?)” [DAFA = Blachère 1967 I 411] suggested in the Arabic lexicons is merely due to a secondary popular etymological contamination.

<sup>83</sup> Note that and PMasai \*- $m\dot{a}l-$  “cow’s dewlap” [Ehret] was borrowed from ECu. (Ehret 1974a: 89). This is whence one may derive Ongota (sometimes classified within Omotic)  $ma^{\circ}alte$  “dewlap” [Fleming 1992/3: 192] too.

<sup>84</sup> Cf. also AA \* $\sqrt{mr}$  “to eat” (discussed by Takács 2008: 313 under #579 and EAAN I 172, #843).

mr.t “Kehle o.ä. eines Gottes” (GR, Wb II 107, 7) = “gorge, gosier” (Lefèbvre 1952: 22; Berlandini, LÄ IV 85; AL II 167, #1786; Blackman, JEA 22, 1936: 105; Fairman, ZÄS 91, 1964: 8, vii) = “throat, voicebox, larynx” (Walker 1996: 269) = “throat, gullet” (PL 445) III WBrb.: (?) Zenaga a-martī “nuque” [Basset 1909: 242, not in TC 2008] III ECu. \*marmar- “neck” [Sasse]:<sup>85</sup> Oromo mórm-ā “Hals” [Reinisch] = morm-a “neck” [Gragg 1982: 291] = (Borana, Orma, Waata dialects) morm-a “neck, throat” [Stroemer 1987: 370], Somali mármar “der lange Hals und Nacken des Kamels” [Reinisch 1902: 302] = mármar “nape of the neck” [Abraham 1964: 175] = marmar “neck of the camel” [Leslau] | Burji marmari “(whole) neck” [Fleming] = marmár-i “neck, nape of neck” [Sasse] (ECu.: Sasse 1979: 24; 1982: 141) III ECh.: Sokoro mórol-düm “dein Schlund” [Lukas 1937: 36]. For this Eg.-AA etymology see Takács 1996: 136, #30; 1997b, 226, #3; 2004b, 61-62, #353; EDE III 400-401; EAAN I 172-173, #844. There are a number of African areal parallels.<sup>86</sup> Ultimately from AA \*√mr “to eat” [GT]?<sup>87</sup>

\*

### Abbreviations of languages and other terms

(A): Ahmimic, (A<sub>2</sub>): Sub-Ahmimic = (L), AA: Afro-Asiatic (Afrasian, Semito-Hamitic), aB(ab.): Old Babylonian, Akk.: Akkadian, Amh.: Amharic, Ar.: Arabic, Aram.: Aramaic, AS: Angas-Sura, Ass.: Assyrian, (B) Bohairic, Bab.: Babylonian, BAram.: Biblical Aramaic, Bed.: Bed’awye (Beja), BM: Bura-Margi, BN: Bade-Ngizim, Brb.: Berber (Libyo-Guanche), BT: Bole-Tangale, C: Central, CAA: Common Afro-Asiatic, Ch.: Chadic, Cpt.: Coptic, CT: Coffin Texts, Cu.: Cushitic, Dem.: Demotic, DM: Dangla-Migama, E: East, Eg.: Egyptian, ES: Ethio-Semitic, ESA: Epigraphic South Arabian, Eth.: Ethiopian, Eth.-Sem.: Ethio-Semitic, (F): Fayyumic, GR: Ptolemaic and Roman period, H: Highland (in Cushitic), Hbr.: Hebrew, Hgr.: Ahaggar, IE: Indo-European, JAram.: Jewish Aramaic, jB(ab.): Younger Babylonian, JPArAm.: Jewish Palestinian Aramaic, JNAram.: Jewish Neo-Aramaic, L: Late, L: Low(land), (L): Lycopolitan Coptic = (A<sub>2</sub>), lit.: literature or literary texts, LP: Late Period, M: Middle, (M): Mesokemic or Middle Egyptian Coptic, Mag.: magical texts, Med.: medical texts, MK: Middle Kingdom, MM: Mafa-Mada, MSA: Modern South Arabian, MT: Mubi-Toram, Mzg.: Tamazight, N: New, N: North, NAA: AA: Northern Afro-Asiatic (Semitic, Egyptian, Berber), NAss.: Neo-Assyrian, NBch.: Northern Bauchi, NE (or NEg.): New Egyptian, NK: New Kingdom, O: Old, (O): Old Coptic, OK: Old Kingdom, Om.: Omotic, P: Proto-,

<sup>85</sup> ECu. \*marmar- was borrowed into Eth.-Sem.: Harari märmär “shoulder”, Gurage \*märmär [Leslau]: Chaha & Ennemor & Gyeto mämär etc. “nape of neck”, Zway marmara “hump of the neck” (ES: Leslau 1963: 111; 1979 III: 406; 1988: 195). H.-J. Sasse (l.c.) derived ECu. \*marmar- “neck” from ECu. \*mar- “round, to roll up” via the mediator meaning \*“(to) turn around”. Cf. PIE \*k<sup>w</sup>ol-so- “Hals” > Latin collum “Hals, Bergjoch”, German Hals < PIE \*k<sup>w</sup>el- “drehen” [IEW 639-640].

<sup>86</sup> Compared by G. Takács (1996: 136, #30), cf. NS \*mor- (??) “neck” [Bender 1994b: 1161, #56] > PKuliak \*morok “throat” [Ehret 1981: 92; Fleming 1983: 470], cf. Nyangi mōrōk “throat” vs. murut “neck, nape, back of neck” [Fleming] ~ ESudanic \*mur(u)t “neck” [GT]: Nile Nubian gu-mur, Shilluk muto, Nandi ki-mut, Bari murut, Masai en-murtu (ESudanic: Fleming l.c.) ~ ENilotic \*-murut- “neck” [Vossen 1982: 455; cf. also Heine & Vossen 1976: 99; Greenberg 1963: 103]. Cf. also Bender 1975: 177, #56.12 (Oromo-Masai); Fleming 1983: 456 (NS-SOm.). Cf. also SOM.: Galila murut “neck” [Fleming 1983: 456: prob. < Nilotic]. H. Fleming (1964: 53; 1983: 470) compared also LECu.: Baiso margi “(whole) neck” and NOm.: Dorze mōrg-e | Maji mork-n’ || SOM.: Dime mork-u “throat”, which may have been borrowed from some NS source.

<sup>87</sup> Discussed in Takács 2008: 313, #579 and EAAN I 172, #843. A further possible Egyptian cognate is treated otherwise in EDE III 395.

PAS: Proto-Angas-Sura, PB: Post-Biblical, PIE: Proto-Indo-European, PT: Pyramid Texts, reg.: regular, S: South(ern), (S): Sahidic, SAA: Southern AA: Afro-Asiatic (Cushitic, Omotic, Chadic), SBab.: Standard Babylonian, SBch.: Southern Bauchi, Sem.: Semitic, SH: Semito-Hamitic, Syr.: Syriac, Ug.: Ugaritic, W: West, Wlm(d): Tawllemmet.

## Abbreviations of author names

Abr.: Abraham, AJ: Alio & Jungrathmayr, Akl.: Aklilu, ALC: Angas Language Committee (see bibliography), Alm.: Alemayehu, AMS: Amborn, Minker, Sasse, Apl.: Appleyard, BK: Bieberstein & Kazimirski, Brt.: Barreteau, BSW: Berhanu, Sisay, Wedekind, BYAG: Bedu, Yakubu, Adamu, Garba, CR: Conti Rossini, Dbr.: Djibrine, Djk.: D'jakonov, Dkl.: Diyakal, Dlg.: Dolgopolsky, Dlh.: Delheure, FH: Farah & Heck, Frj.: Frajzyngier, Ftp.: Fitzpatrick, GB: Gesenius & Buhl, GT: Takács, Ibr.: Ibrizimow, IL: Institute of Linguistics, JA: Jungrathmayr & Adams, JI: Jungrathmayr & Ibrizimow, Jng.: Jungrathmayr, JS: Jungrathmayr & Shimizu, KB: Koehler & Baumgartner, KM: Kießling & Mous, LH: Littmann & Höfner, LS: Lamberti & Sottile, Mnt.: Montgolfier, MQK: Mous, Qorro, Kießling, Nct.: Nachtigal, NM: Newman & Ma, OS: Orel & Stolbova, PAM: Prasse, Alojaly, Mohamed, PH: Parker & Hayward, RB: Rapp & Benzing, TC: Taïne-Cheikh, TG: Takács.

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## Omotic lexicon in its Afro-Asiatic setting VII: Further addenda to Omotic roots with \*b-<sup>1</sup>

Gábor Takács

Department of Classical Philology, University of Łódź (UL)

Lexicographical Library of Afro-Asiatic Root Research at Balatonederics (LLAARR)

Member of the Associazione Internazionale di Studi sul Mediterraneo e l'Oriente, Roma (ISMEO)

e-mail: gaktak@datatrans.hu | ORCID: 0000-0002-2466-6451

**Abstract:** Gábor Takács, *Omotic lexicon in its Afro-Asiatic setting VII: Further addenda to Omotic roots with \*b-*. The Poznań Society for the Advancement of Arts and Sciences, PL ISSN 0079-4740, pp. 145-175

The paper constitutes part of a long-range series aiming, step by step, to identify the inherited Afro-Asiatic stock in the etymologically little explored lexicon of the Omotic (West Ethiopia) branch of the Afro-Asiatic family displaying the least of shared traits among the six branches of this macrofamily, which suggests a most ancient Omotic desintegration reaching far back to the age of post-Natufian neolithic.

**Keywords:** Ethiopian languages, Afro-Asiatic (Semitic-Hamitic), comparative linguistics, etymology.

### Introduction

Omotic (West Ethiopia) and Chadic (Rep. of Chad, Cameroon, Nigeria), i.e., the 5<sup>th</sup> and 6<sup>th</sup> branches,<sup>2</sup> resp., of the immense Afro-Asiatic (Semitic-Hamitic) language macrofamily have so far been the least studied from the standpoint of their external lexical correspon-

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<sup>2</sup> The numeration of the branches follows the commonly accepted nomenclature of the Afro-Asiatic classification established by J.H. Greenberg (1955: 51 and fn. 10; 1963: 48-49), who still distinguished five branches: (1) Semitic, (2) Berber, (3) Ancient Egyptian, (4) Cushitic, (5) Chadic, which was due to Omotic languages having been in his day still classified under West Cushitic until the pioneering studies in the 1970s by H.C. Fleming (1969, 1974, 1976a, 1976b) and by M.L. Bender (1975), cf. also Fleming & Bender (1976), who established Omotic as a separate (i.e. 5<sup>th</sup>) branch of Afro-Asiatic, distinct from Cushitic. The Afro-Asiatic classification has thence become complete and so it is presently valid, which has been recently presented in a practically complete up-to-date list in EDE I: 9-34.

dences compared with the other four branches: Cushitic (Ethiopia, Eritrea, Somalia, Kenya, Tanzania), Berber (Maghreb),<sup>3</sup> Egyptian and Semitic. In Chadic, at least, we have the unique<sup>4</sup> and lasting achievements accumulated by O.V. Stolbova (Moscow) over the past five decades of her permanent and fruitful research for both its inner reconstruction and its external comparison. This kind of research on the inherited Afro-Asiatic stock of the Omotic root inventory, let alone the elaboration of the underlying historical phonology, has by far been advanced in this branch to the same extent as in Chadic, even though this branch, according to both the isomorphic and provisory glottochronological calculations, appears as the very first unity of the Afro-Asiatic parental community to have branched off (cf. Takács 2015) and so promises to end up as the inventory consisting of the most archaic segments of the Common Afro-Asiatic (CAA) lexicon.

We owe much to H.C. Fleming, M.L. Bender, and M. Lamberti for their pioneering studies on the internal lexical comparison and phonological reconstruction of Omotic. The latter two authors did even manage to produce monographs on the subject,<sup>5</sup> where, however, a systematic phonological-lexical equation with the other branches was not even targeted. The lexical comparisons by M. Lamberti were always, as a rule, restricted to Cushitic and Ethio-Semitic, which is overwhelmingly true about both other authors. Ironically, the very first book by M.L. Bender (1975) contains merely a loosely composed list of supposed parallels to Omotic roots in- and outside Afro-Asiatic, but this attempt, unfortunately, had not even reached the level of J.H. Greenberg's (1955, 1963) "mass comparison", and is nothing more than a collection of putative guesses on often unconvincing look-alikes.

But, whereas that was understandable half of a century before, as the unity and structure of this 5<sup>th</sup> branch had not even been recognized by that time at all, today, in the era of a more advanced inter-branch comparison as demonstrated in the masterpieces by Ch. Rabin, A.B. Dolgopolsky and his pupil, O.V. Stolbova, this method is no longer tenable. For the case of Omotic, this demand has first been formulated perhaps by Ch. Ehret (1979: 52) in his assessment of M.L. Bender's (1975: chapter 5) Omotic-AA comparative lexicon: "It is indicative of the rapid advances ... in phonological reconstruction within different recognized branches of Afroasiatic that we can already begin to consider refining Bender's core vocabulary comparisons with a view toward identifying true cognates and lexical isoglosses that define a possible pattern among the six branches, and toward evalu-

<sup>3</sup> Tamazight being the native designation for 'Berber language' preferred primarily among scholars and the intelligence in general with a Berber (Amazigh) background, we better stick to the traditional term 'Berber' commonly accepted in all international circles of Afro-Asiatic comparative linguistics also.

<sup>4</sup> Due homage should be paid, of course, to the merits of P. Newman (1966 jointly with R. Ma, 1977) and H. Jungraithmayr (JS 1981, JI 1994) too, but their output is, nevertheless, no match for that of A.B. Dolgopolsky (1930-2012) in this regard, both in terms of quantity or quality, nor to that of O.V. Stolbova, who focused solely on Chadic consonantal-lexical reconstruction with ingenious insights into its AA relations over the half a century of her enormously fruitful research, following in the footsteps and reminiscent of the skills of her sometime Muscovite master, one of the most original experts of AA comparative consonantism ever, may his memory be blessed.

<sup>5</sup> Bender 1975, 1999, 2003 (all these volumes deal with Omotic as a whole), Lamberti 1993 (two volumes at a time: Yemsa and Shinasha, resp.), Lamberti and Sottile 1997 (Wolayta).

ating the conclusions about the Omotic relationship to the rest of Afroasiatic implied by Bender's grammatical isoglosses." However, Ehret (1979: 53-56) only listed just a few sets of isoglosses between Omotic and the diverse branches of Afro-Asiatic. But farther than this he has not reached either except for arriving at some tentative estimation of Omotic's position among the Afro-Asiatic branches.<sup>6</sup> Thereby, Ehret (1979: 61) has concluded to a few historical implications as for the dispersal of the parental PAA community, their spread through North Africa. As for the "Vocabulary and phonological reconstructions", accordingly, Ehret has suggested a valid and truly supportable option for handling Omotic core lexical stock as an especially archaic segment reflecting the most ancient layer of the parental Afro-Asiatic vocabulary void of subsequent areal innovations (that is, like the well-known Twareg-Chadic parallels, not loans, or Berbero-Cushitic isoglosses).<sup>7</sup> One must add here a similar pilot study into the Omotic lexicon by H.-J. Sasse (1981: 147-148), perhaps the most rigorous and convincing *reconstructeur* ever in Afro-Asiatic aside from great Dolgopolsky, for whom the only plausible way of treating cognates was the classical neo-grammarians approach.<sup>8</sup> This is how the idea of applying it at last for Omotic also occurred to him (Sasse 1981: 148-149): "Wie man auf diese Weise zu Ergebnissen gelangen kann, soll im folgenden am Beispiel des Omotischen demonstriert werden" especially because "... scheint nun seine Afroasizität mehr und mehr in Zweifel gezogen zu werden." Thus, "... es sei sinnvoll, bei vergleichenden Untersuchungen das Omotische zunächst auszuklammern ...: Berberisch und Semitisch sind ganz offensichtlich miteinander verwandt ... Zieht man jedoch das Omotische hinzu, so vermindert sich die Anzahl der Isoglossen plötzlich so stark ..." Nevertheless, Sasse (1981: 149) confessed: "Über die Afroasizität des Omotischen denke ich heute nicht mehr ganz so pessimistisch wie vor acht Jahren, da mir heute mehr Material zur Verfügung steht, das mein Bild vom Omotischen leicht

<sup>6</sup> Ehret (1979: 6§): "The final cognation percentage range is that between Omotic and all the rest, at a startingly low average of about 1%. Only among the neighboring ... Omotic and Cushitic languages ..., especially Omoto and Highland East Cushitic, and between Eastern Omotic speeches and Eastern Cushitic (and sometimes between Omotic and Agew) do Omotic scores ... much exceed 0-2%. ... Bender's conclusion that Omotic forms one primary branch of the Afroasiatic family versus ... all the rest ... stands up."

<sup>7</sup> Ehret (1979: 61-62): "a number of intermediate stages will have to be reconstructed also if the truly proto-Afroasiatic remnants are to be effectively distinguished from later but geographically widespread innovations. Semitic will need to be compared first against Berber and Egyptian to see if confirmatory phonological innovations linking the three as against the rest of the family turn up. Similarly there should be shared Cushitic phonological developments attesting that grouping and, at a deeper remove, innovations setting off 'Erythraic' from Omotic. ... The over-weight of knowledge ... on Semitic ... can be felt in the common tendency to treat Semitic as most representative of the original state ... and the others as diverging from the prototype in whatever degree ... From what the vocabulary isoglosses suggest, even the occurrence of a feature through all the Afroasiatic divisions except Omotic does not guarantee its proto-Afroasiatic presence. ... Omotic might be more typical of proto-Afroasiatic in many features ..."

<sup>8</sup> Namely, in his words (l.c.): "das Aufzeigen von Zusammenhängen, die nur dann einen Sinn ergeben, wenn man vom Zugrundeliegen eines gemeinsamen Ursystems ausgeht. Solche Zusammenhänge sind ... nicht leicht aufzufinden ...: je breiter gestreut die Gemeinsamkeiten sind, desto unwahrscheinlicher ist, daß sie auf Entlehnung oder Zufall zurückzuführen sind. Wesentlich ist dabei vor allem ... die Unterscheidung von Neuerungen und Archaismen ... – man schämt sich fast, das auszusprechen, so selbstverständlich sollte es sein."

verschoben hat.”<sup>9</sup> Then Sasse proposed all in all just 4 Omotic vs. Afro-Asiatic matches making this pioneer study, however, a real pioneering masterpiece (even venturing to establish certain consonantal correlates), a promising forerunner<sup>10</sup> of the present series ‘Omotic lexicon in its Afro-Asiatic setting’.

As for the internal consonantal correspondences of the Omotic groups, our vision is still just forming as no definitive and thoroughly demonstrated *Lautgeschichte* of Omotic has been achieved as yet in a convincing neo-grammarians manner as it was completed in some other luckier Afro-Asiatic branches like Semitic (cf. esp. Kogan 2009 and 2011), Berber (Kossmann 1999) or East Cushitic (Sasse 1979). But the tentative results by M.L. Bender (1987: 23-28, 31-32; 1988: 122-127, 136-137, 139-144; 2003: 310-313), even if these are based on an extensive Greenbergian ‘mass comparison’ of the basic vocabulary, are, so to say, of a precious orientation value for our research, as well as the masterful treatment of Omotic sibilant correspondences by R. Hayward (1988), whereas the outlines of Omotic consonantal matches by Ch. Ehret (1995: 9-12) and M. Lamberti & R. Sottile (1997: 253-260) are, unfortunately, to be treated with much more caution for a few reasons.<sup>11</sup>

As for the elaboration of Afro-Asiatic inter-branch comparative phonology, in turn, already Ch. Ehret (1979: 52)<sup>12</sup> has proposed a working hypothesis in general at the same

<sup>9</sup> Detailing the “*Uneinheitlichkeit*” of the Omotic conjugational patterns (suggesting a “*Neuerung*”) as well as its pronominal systems, “bei denen offenbar ältere und jüngere Schichten zu unterscheiden sind”, Sasse (1981: 149-150) found personally “noch interessanter ... als die morphologischen Afroasiatismen des Omotischen ... eine Reihe von Wortschatzgleichungen. Auch im Wortschatz des Omotischen ist bei flüchtiger Betrachtung sehr wenig Afroasiatisches zu erkennen. Fast alles, was sich beim ersten Durchsehen von Wortlisten anbietet, stellt sich bald als kuschitisches oder semitisches Lehnwort heraus. Sobald man jedoch ein bißchen tiefer eindringt, findet man plötzlich ein Paar echte ‘Leckerbissen’, die ... als Entlehnung nicht nur aus prinzipiellen Erwägungen, sondern einfach mangels einer Quelle ausgeschlossen ist.”

<sup>10</sup> Sasse (1981: 152): “Dieser Art Beispiele findet man bei eingehender Untersuchung eine ... Reihe. ... es sei nur angemerkt ..., daß das Omotische einen vielversprechenden Kandidaten für die Mitgliedschaft im afroasiatischen Verein abgibt.”

<sup>11</sup> Aside from just *ex cathedra* composing the table of “Provisional Omotic Consonant Reconstructions” stated (op. cit., p. 10) as “differing only slightly from” the outcome of Bender 1988, Ch. Ehret (1995: 10-12), has failed to present a detailed demonstration for every single rule. One can hardly be satisfied by his vague reference to his ‘data’ (in general) drawn from Bender 1971 that are “confirmed and expanded upon by other materials” like Mocha (Leslau 1959), Koyra (Hayward 1982), Ometo (Hayward 1987), Yemsa, Bench/Benesho, Ari (Hayward 1990), from which, Ehret has only quoted some items sporadically scattered throughout his AA comparative lexicon (composed along an all too high quantity of methodological blunders, cf. Takács 2018: 237-239, §I), grasped out of their respective Omotic comparative contexts. On the other hand, M. Lamberti’s daring vision of Cushito-Omotic consonantal shifts (manifesting itself in other works by him also), including his vague hypothesis on original labiovelars, is radically different from that of the more conservative and cautious mainstreamers like Bender and Fleming and it is with regret that I must also state how much I had to refrain from using Lamberti’s all too unconvincing Cu.-Om. lexical matches. Besides, some other equally vague hypotheses of the eminent Italian researcher have evoked a series of rather bitter pieces of reciprocal polemy in Omotic studies, cf. Sasse 1990 vs. Lamberti 1992 or Lamberti 1991 and 1993c vs. Fleming 1992 and 1993.

<sup>12</sup> He even specified some of the “the correspondence patterns ... in roots of inter-branch occurrence ...: (1) Reconstructible voiced stops in one branch normally correspond’ to the same ones ‘in the others ... (2) Emphatics tend to correspond to emphatics; where an emphatic is validly equivalent to a non-emphatic, the non-emphatic will be in a language which has deleted or greatly reduced or restricted the occurrence of emphatics ... (3) Laterals in one branch will correspond usually to laterals in other branches ...”

time when, independently and more precisely elaborated, the former Diakonoff team<sup>13</sup> has presented their substantially similar new vision of the Proto-Afro-Asiatic phonological reconstruction (esp. as for the affricates and the postvelars)<sup>14</sup> and some items of the inter-branch correlates which my own research has fundamentally corroborated (cf. esp. Takács 2011a). These are the principles we are following in this investigation also.

To the best of my knowledge, the only special studies devoted to a systematic treatment of Omotic vs. Afro-Asiatic lexical matches are due V. Blažek (then Příbram, now Brno, Masaryk University), who presented comprehensive sets of etymologies for an all-round range of the Omotic anatomical terminology at the 2<sup>nd</sup> International Symposium on Cushitic and Omotic Languages (Turin, November 1989), which had long remained unpublished until these results were most recently (partly) included in the lengthy paper by V. Blažek (2008) on the sketchy lexicostatistical comparison of Omotic languages comprising 100 items of the basic vocabulary, where, unfortunately, not every single lemma was provided with an Afro-Asiatic cognate.

In my experience, in the light of the above enumerated scarce research record, I venture to claim that perhaps this branch represents the least cultivated field within the whole Afro-Asiatic domain from the viewpoint of a systematic etymological elaboration of its immense inherited lexical treasures. This new series for the ‘Omotic lexicon in its Afro-Asiatic setting’<sup>15</sup> started some decade ago precisely for filling as many as possible of the innumerable gaps in the scanty etymological research on Omotic. The etymological entries are arranged according to consonantal roots, i.e. in the order of how the articulation places follow (in the C<sub>1</sub>, C<sub>2</sub> etc.) from the labials down to the laryngeals ending in the sonants.

As for the methods in elaborating the cognate sets, I have long been adhering to the methods of AA inter-branch comparison so masterfully practised by A.B. Dolgopolskij, a genuine mastermind of AA comparative-historical phonology and lexicon, in his brilliant etymological studies from the 1980s,<sup>16</sup> whence I have elaborated the principles of ‘bi/tri-polar mirror’ of comparison (on which cf. esp. Takács 2011a: 19 in general and with fur-

<sup>13</sup> SISAJa I-III (in Russian from 1981-6), revised English version: HCVA I-V (from 1993-7).

<sup>14</sup> Elaborated pace SIFKJa (albeit not applied for Cushitic as therein) in the reports of the Russian AA dictionary project (cf. D’jakonov- Porhomovskij 1979, Diakonoff 1984, D’jakonov et al. 1987, 1993).

<sup>15</sup> So far the following parts of this series have been published over the past ca. decade: ● Omotic Lexicon in its Afro-Asiatic Setting I: Omotic \*b- with Dentals, Sibilants, and Velars.= Busetto, Luca (ed., scientific committee: Mauro Tosco, Livia Tonelli, Roberto Sottile): *He bitaney laagaa. Dedicato a / Dedicated to Marcello Lamberti*. Quaderni di Lingua e Storia 3. Milano, 2011., Qu.A.S.A.R. s.r.l. Pp. 57-74. ● Omotic Lexicon in its Afro-Asiatic Setting II: Omotic \*b- with Nasals, \*r, \*l, and Weak Consonants.= Zuckermann, Gh. (ed.): *Burning Issues in Afro-Asiatic Linguistics*. Cambridge, 2012., Cambridge Scholars Press. Pp. 161-184. ● Omotic Lexicon in its Afro-Asiatic Setting III: Omotic \*p- and \*p<sup>h</sup>-.= *Journal of Language Relationship* (Moscow) 8 (2012), 103-116. ● Omotic Lexicon in its Afro-Asiatic Setting IV: Addenda to Omotic \*b-.= *Acta Orientalia Acad. Scient. Hung.* (Budapest) 75/1 (2022), 123-164. ● Omotic Lexicon in its Afro-Asiatic Setting V: Addenda to Omotic \*b-, \*p/f-.= *Acta Orientalia Acad. Scient. Hung.* (Budapest) 75/4 (2022), 651-708. ● Omotic lexicon in its Afro-Asiatic setting VI: Addenda to Omotic roots with \*b<sup>l</sup>-, \*p<sup>l</sup>-, \*p- (or \*f-).= *Lingua Posnaniensis* (Poznań) 63/1 (2021), 85-112.

<sup>16</sup> Cf. A.B. Dolgopolskij’s fundamental studies on the Semitic matches of Angas-Sura \*-γ- (1982), initial consonant correlations in Sem.-ECu. (1983), SCu.-Sem. laterals (1987), Sem.-ECu. initial laryngeals (1988), the reconstruction of the AA laterals (1989), Sem. \*š vs. Ch. (1990).

ther literature) originally for the case of Egypto-Semitic vs. South Cushitic examined by me since 1998,<sup>17</sup> but then extended also for numerous other branches/groups of AA.<sup>18</sup>

In the preceding issues of my series (labelled OmAA in these papers), I was publishing those new etymologies of Omotic roots that I had observed during my work (1994-2007) on the vols. II-III of my Egyptian etymological dictionary (EDE, with initial labials). Since then, I have managed to turn Bender's (2003) epoch-making Omotic comparative phonology and lexicon (arranged according to groups and English meanings of the basic lexicon) upside down by the work of several years (by spring 2020) and, henceforth, now I possess an as complete as possible Common Omotic comparative wordlist arranged A-Z according to the initial consonants of the Omotic roots, which may accelerate research for a more secure assessment of the Afro-Asiatic nature of the Omotic lexicon and, potentially, for turning Bender's provisional sets of consonantal correspondences and *ad hoc* lexical reconstructions into definitive ones. This new research of mine, starting in 2020, has brought forth a formerly unseen mass of new isoglosses between Omotic vs. esp. Semitic (Arabic) or Berber or West Chadic (Angas-Sura) which could not have been accomplished without my new Omotic alphabetic wordlist, which may in all likelihood alter our views on the degree of inter-branch relationship and make us better understand the special position of Omotic.

The preceding fourth and this fifth<sup>19</sup> parts of my series, designed for the etymological analysis of the Omotic lexicon in its Afro-Asiatic setting, contain new comparanda with initial \*b-, whereas the sixth part (completed simultaneously)<sup>20</sup> discussed basically additional Omotic roots with \*b̥-, \*p̥- and the initial voiceless labials. This seventh and the subsequent eighth parts will survey again additional items of the Omotic lexical stock with initial \*b- plus dentals and sibilants, resp.

### Om. \*b- + Ø

**226. NOm.: Konta ba, -bi-ta** (?) “many” [Fleming apud Bender 2003: 20, #86] ||| CCh.: Jimjimen (Bata-Zumo) bwà-n “élargir (un trou)” [Hoffmann apud Brt.-Jng. 1990: 87] | Lame bà “2. grand” [Sachnine 1982: 277].

<sup>17</sup> Cf. Takács 1999b: 393-426; 2000a: 69-117; 2003: 143-162; 2005a: 65-83; 2005b: 207-231; 2005c: 213-225 and 2010: 91-122. For the case of Ma'a sibilants see Takács 2002a: 109-133; 2009b: 125-131; Ma'a š-; 2009c: 135-142.

<sup>18</sup> E.g. I was using the Eg./Sem. mirror for the case of ● NBrb.: Tamazight d- and z- (Takács 2006), EBrb.: Ghadames b- + SBrb.: Ahaggar h (Takács 2000c: 333-356; 2004b: 31-65; 2011a: 83-103), ● Agaw/CCu. (Takács 2012: 85-118), ECu. \*ā (Takács 2000b: 197-204; 2011a: 110-111), LECu.: Rendille ž- (Takács 2001b: 265-269; 2011a: 112-114), ● CCh.: Musgu and Masa h- vs. h̥- (Takács 2013: 153-184), ● ECh.: Mokilko (Takács 2002b: 145-161), ● ECh.: Dangla-Migama (Takács 2009-2010: 133-148; Bidiya b-; Takács 2009a: 119-124; Bidiya č- and ž-).

<sup>19</sup> Published in *Acta Orientalia Acad. Scient. Hung.* 75/1 (2022), 123-164.

<sup>20</sup> Omotic Lexicon in its Afro-Asiatic Setting VI: Addenda to Omotic \*b̥-, \*p̥-, \*p/f- = *Lingua Posnaniensis* 63/1 (2021), 85-112.

**226.1.** Reduplicated in WCh.: Hausa bábbá “1. big, 2. important, 3. adult, 4. elder/-st, 6. bigness” [Abraham 1962: 52] || CCh.: Musey búbù, Lew búbú, Marba búbú “largeur” [Ajello et al. 2001: 33], Zime-Dari bābā “1. (n.) force, 2. (adj.) fort(e)” [Cooper 1984: 2] || ECh.: Mubi bbá, pl. bōbū “groß” [Lukas 1937: 180].

Here might belong further varieties of the same root family with(out) an alef, cf.:

**226.2. PAA** \*√bʔ (or \*√bʔy) “big” [GT]: SCu.: Qwadza baʔ-at- “to increase (in size)”, baʔ-ati “long” [Ehret 1980 MS: 1] || CCh.: Mafa biyaʔa ~ biy-biyyaʔa “grand” [Brt.-Bléis 1990: 93] || Sem.: Ar. √bʔy “1. redresser la tête, se redresser au point de paraître plus grand, 2. s’élever par la gloire au dessus des autres, 3. se vanter et se regarder comme supérieur aux autres”, baʔū, bāʔwāʔ- “1. gloire, illustration, 2. orgueil” [BK I 81; DRS 40].

**226.3. PCh.** \*√by “big” [GT], cf. WCh.: Bokkos hây “groß” [Jng. 1970: 140] || CCh.: Musgu bai ~ abai [Krause] = boi ~ aboi [Rohlf] = aboi [Overweg] = abai [Décorse] “1. groß, 2. auch: dick (Krause), auch: viel (Rohlf)” [F. Müller 1886: 393; Lukas 1941: 42], Puss abay “grand, important” [Tourneux 1991: 71].

Cf. EDE II 13 with further discussion, also Takács 2009d: 316, #1 and EAAN I 40, #138.

**227. NOm.: Kullo bā** “boy, child, son” [Alemayehu Abebe in Bender 2003: 13, #17] || Ch. \*vʷay (???) “child” [GT]:<sup>21</sup> WCh.: PRon \*fʷay (?) [\*fʷ- regular < \*bʷ-/bU-?]: Bokkos fú “Kind” [Jng. 1970: 141], Daffo-Butura fyè (pl.) “Knaben, Jungen” [Jng. 1970: 218], Sha foy “Knabe, Kind”, foy ʔa-món “mein Sohn” [Jng. 1970: 284], Kulere fo “männl. (?) Kind”, fwè “Junge, Kind”, fwèy (Richa dialect) vs. fwî (Ambul dialect) má mor “Mädchen, Tochter” [Jng. 1970: 352] | Kirfi (pl.) bōfōyò “son” [Schuh], Galambu bwe: “child” [Schuh] | Diri áviyà “child” [IL] || CCh.: Zime-Batna (Lame) vâi, pl. ʔúdò (dér. vèvâi) “enfant” [Sachnine 1982: 300], Zime-Dari vāy, pl. tàw “enfant” [Cooper 1984: 29] (Ch.: also JI 1994 II 74-75) || Sem.: Ar. baww- “1. petit de chameau, 2. sot, stupide, 3. peau de petit de chameau empaillée avec l’herbe tumām- qu’on amène à une chamelle pour lui faire croire que c’est son petit, ce qui fait qu’elle donne du lait ou en allaite un autre” [BK I 174-175] = “a skin of a young unweaned camel stuffed with straw or with tumām- (i.e. panic grass) or with dry herbage to which a she-camel is made to incline when her young one has died : it is brought near to the mother of the young camel (that has died) in order that she may incline to it and yield her milk over it, 2. also: a she-camel’s young one, 3. stupid, foolish, having little sense or intellect” [Lane 270b] = “chamelon nouveau-né” [DRS 51, BWV/Y1: isolated in Sem.].

**228. NOm.: Dizoid \*bi** “feather” (once also attested in the meaning “hair”) [Bender 2003: 209, #49: isolated in Om.] might at the moment, until we gain more Omotic cognates enabling us to specify the C<sub>2</sub> closer, be attached to two alternative AA roots:

**228.1.** More probably, it might be conceived, although neither the ʔayin nor the awa are reflected in Dizoid, as a reflex of **PAA** \*√bʔw “1. hair (of body), 2. bark (of tree)” [GT]:

<sup>21</sup> The Chadic parallels, given the *lautgeschichtliche* uncertainty of the labial radical, might alternatively be affiliated with Sem.: Ug. pyy “lad” [Gordon after Virolleaud] = pyy “boy” [Segert apud Blazek], py-t “girl” [Gordon 1955: 313, #1566] = py-t “junges Mädchen” [WUS #2246] | Ar. fayā- [\*fayay-] “das Junge eines Tieres” [WUS]. See also Blazek 1994 MS Elam, 7, #27; 1999: 61, #27 (Ug.-Ron).

Sem.: Syr. baʿwā “poils de chameau” [DRS 74, bʿw3: isolated in Sem.] ||l WCh.: Hausa ḥááwóó “bark” [Abraham 1962: 92] = ḥááwó, also ḥááwá “1. bark, rind, 2. scales, 3. shell” [Skinner]<sup>22</sup> | AS \*ḥu (?) “bark (of tree)” [GT]: Chip ḥu-tĩj “bark (of tree)” (tĩj “tree”) [Kraft] (Takacs 2004: 36: isolated within AS). A remote PAA root variety with a voiceless Anlaut may have been retained by LEg. fʿ ~ fʿj<sup>23</sup> (hair determinative) “lock of hair” (NE,<sup>24</sup> Pap. Turin 1983, vo. I 47-48, Černý 1958: 210, #6 after I. E. S. Edwards) = “cheveux” (AL 77.1544) = “lock of hair” (DLE I 190) = “Haarlocke” (GHWb 305) > Dem. fʿ ~ fʿj ~ fj “Haar” (DG 144, 4) → Coptic (OSF) ϣω, (S) ⲃω ~ ⲟϣω, (SBA<sub>2</sub>) ϣωϥ, (A) ⲃωϥ, (AA<sub>2</sub>) ϣⲟϣϥ, (M) ϣⲟϥ, (BF) ϣωⲓ, (F) ⲃωⲓ ~ ϣⲟϣϣ “hair” (CD 623a; CED 265; KHW 345).

**228.2.** Otherwise, the Dizoid stem might be phonologically more safely rendered as a derivative via metonymy from PAA \*ṣby “1. leaf, 2. sprout, 3. flower” [GT]: SBrb.: Ahaggar buyi (Foucauld: bouii) “produire des boutons qui donneront fleurs et fruits” [Foucauld 1951-2: 42; cf. DRB 142: isolated in Brb.] ||l Bed. báya ~ báye “Blatt, Baumblatt” [Reinisch 1895: 54] = bəyi ~ bāyi “leaf of the small crisp kind found on thorny acacias” [Roper 1928: 166] ||l HECu.: Hadiyya búyy-a “leaf”, Kambatta buyy-a “leaf” (HECu.: Zaborski 1989: 584, #45) ||l WCh.: Angas [ʰbù] “guinea corn ‘ear’” [Burquest 1971: 43] = mbu “guineacorn flower” [ALC 1978: 38] (Takacs 2004a: 19: isolated in AS) | Tangale bayo “leaf (for preparing soup)” [Jng. 1991: 71] ||l CCh.: Fali-Muchella ba “leaf” [Kraft] | Gude ba “leaf” [Kraft] | Hitkala báyá or báyà ùfù “leaf” [Lukas 1964: 106] | Glavda áábàya “leaf (worn by women behind)” [Rapp & Benzing 1968: 1] | PMasa \*ḥo [\*ḥ- < ?] “to flourish” [GT]: Masa ḥò “(intr.) fleurir”, (verbo-nominal) [ḥò-ná] “1. le fait de fleurir, 2. la fleur” [Caïtucoli 1983: 54], Masa-Bongor ḥó-ná (v.n.) “fleur” [Jng. 1971/2 MS: 77], Gizey/Wina, Masa, Ham, Musey, Lew, Marba ḥo “fleurir” [Ajello et al. 2001: 26] (CCh.: Kraft 1981: #131) ||l ECh. \*ṣby “(to) flower” [GT] > Lele b̥yē “flower” [Garrigues] | DM \*bōy- “(to) flower” [GT] > WDangla bóóyé (m), pl. booya “fleur”, bóòyè “fleurir” [Fédry 1971: 94], EDangla bóóyé “fleurir, être en fleur”, bōoyō (m), pl. bóoyì “la fleur” [Dbr. & Mnt. 1973:

<sup>22</sup> Affiliated by N. Skinner (1996: 31) with Hausa baya “outside”, ḥoora “to remove bark”, all derived by him from OS’s AA \*paḥ- “bark, skin” and \*poḥ- “to peel, skin” etc. Phonologically false.

<sup>23</sup> Can be read either fʿ3 or fʿ (if we assume here a syllabic or group writing). Cannot be certainly decided whether reading the final -3 is “superfluous” (syllabic or group writing). The suggested Afro-Asiatic etymology of the word indicate that the OEg. root was either \*fʿ3 < \*f3ʿ (metathesis) or \*fʿ < \*f3ʿ („lost”, i.e., eroded -3-). Back two decades ago (Takács 1999a: 20; EDE II 564-565) I had preferred the second scenario (i.e., LEg. fʿ or fʿ3 < OEg. \*f3ʿ = \*fʿʳ) and so I was disposed to equate the Late Egyptian term with:, cognate with Sem. \*parʿ- “capelli fluenti” [Frz.] = \*par(a)ʿ- “hair (on top of the head)” [Belova et al. 1994 MS: #77] = \*parʿ- “(loose) hair of the head” [SED]: Akk. pērtu ~ pēretu “Haupthaar” [AHW 856] = pirtu “Haupthaar” [Holma 1911: 34] = pirtu “Kopfhaar” [Torczyner 1912: 770] ||l Hbr. peraʿ “das volle Haupthaar” [GB 660] = “loosely hanging and unplaited hair on the head” [KB] | Ar. farʿ- “das volle Haupthaar” [GB] = “chevelure” [BK] = “hair of women, shag of hair (космы волос)” [SISAJa] (Sem.: Holma 1911: 34; Frz. 1964: 268, #2.46; SISAJa I, #46; Belova 1992: 16; SED I 192, #218) ||l EBrb.: Ghadames ta-fr̥j-t, pl. ta-fra-t-in “1. mèche de cheveux qui s’arrondit sur le front, 2. languette de chausson ou de chaussure qui recouvre le dessus du pied, ornée ou non de broderies de soie” [Lanfry 1973: 94, #140] ||l NBrb.: Mzab tu-fr̥a-t, pl. tu-fra-t-in “mèche bouclée de cheveux” [Delheure 1984: 50] ||l LECu.: Afar b̥ürʿ-i [GT: regular ECu. \*b- < AA \*f-?] “tight wooly hair (like that of a negro)” [PH 1985: 74] ||l CCh.: Lame p̥ēr “favoris, poils du visage” [Sachnne 1982: 268].

<sup>24</sup> S. Sauneron (1964: 20) pointed out the word for GR also, namely in the Abaton Decree, which prohibited to approach the holy place for z nb ḥr fʿ “everyone with hair”.

52] = bòòyé “fleurir” [Brt. & Jng. 1990: 121] = bóóyé “blühen” [Ebobisse 1979: 132; 1987: 78], Bidiya booy (booyí, booyèŋ), pl. boyòw (boyòowí, boyòowerŋ) “fleurir”, bòòyò (m), pl. bòòyó “fleur” [AJ 1989: 60] = bòòyò “fleur” [Fédry], Migama (Dyongor) bòòyò (bòoyé, bòyáa) “fleurir”, búuyùmú (m), pl. búuyùmí “fleur” [JA 1992: 71-72] | Ubi bòy-in (an inf. with -in) “fleur” [Alio 2004: 268, #47] (ECh.: Fédry 1977: 107; JI 1994 II 147). Cf. EDE II 17; EAAN I 72-73, #325.

**229. NOm.: Ganza bubu** “male” [Reidhead in Bender 2003: 277, #101: isolated in Om.] ||l WCh.: perhaps PAngas \*b<sup>w</sup>op ~/> \*bop (prothetic nasal) “he-goat” [GT]: Angas bwòp “a he-goat (Hausa bunsuru)” [Foulkes 1915: 154] = ṃbwòp “Ziegenbock” [Jng. 1962 MS: 24] = mbop “he-goat” [ALC 1978: 38] = mbop “he-goat” [Kraft] (AS: Takacs 2004: 23) ||l NBrb.: Ntifa (ta)-bubbu-(t) “verge d’enfant”, Wargla bibb<sup>(w)</sup>i “verge (grossier), bibi “verge (d’enfant)” | Shilh a-bubu “pénis”, (ta)-bubbu-(t), also bubba “verge d’enfant” ||l SBrb.: presumably Ahaggar ā-bbo, also bubbu “pipi (enf.)” (Brb.: DRB 6, B11) < PAA \*√bb “male” [GT].

**229.1.** Any connection to WCh.: Hausa bábbá “1. big, 2. important, 3. adult, 4. elder/-st, 6. bigness” [Abraham 1962: 52] || CCh.: Musey búbù, Lew búbú, Marba búbú “largeur” [Ajello et al. 2001: 33], Zime-Dari bābā “1. (n.) force, 2. (adj.) fort(e)” [Cooper 1984: 2]?

### Om. \*b- + dentals

**230. NOm.: Kefoid \*bad-** “to split, cut (wood)” [OS in HSED falsely as POm.] = \***bad-** “to split (wood)” [Ehret 1995] = \***badd-** “to split” [Bender 2003: 200, #90]:<sup>25</sup> Kafa bād “brechen, spalten, trennen” [Reinisch 1888: 269]<sup>26</sup> = bádd-ete “egli spaccò” [Cerulli 1951: 410],<sup>27</sup> and Mocha bàdda-yé “to split wood” [Leslau 1959: 21], Shinasha (Bworo) bádd- “spalten” [Lamberti 1993a: 281] (Kefoid: Bender 2003: 344, #90: isolated in Om.) ||l ECu. \*bad- “to separate” [Ehret]: Sidamo bad- “trennen, auseinanderhalten” [Lamberti] = bad-í “to separate” [Leslau quoted also by OS in HSED] | Sheko badd- “spalten” [Lamberti] (HECu.-NOm.: Lamberti 1993a: 281) ||l Ch. \*bVd(d)- “to untie, to separate” [CLD]:<sup>28</sup> WCh.: Kofyar bót ~ doe-bót [də-] “half” [Netting 1967: 2, 7] (Takács 2004a: 19: isolated in AS) | Tangale abde “to split, divide, separate, depart” [Jng. 1991: 65], cf. WCh. \*√bd “knife” [JS apud Ehret] || CCh.: Uldeme bīt “couper rapidement” [Sachnine, so also Colombel 1982: 132] | perhaps Munjuk-Puss aftiy [-ft- < \*-bt-?] (f) “1. détacher, 2. divorcer de” [Tourneux 1991: 77], Mbarā bût “détacher” [TSL 1986: 255], Vulum bîdî “détacher” [Tourneux 1978: 288] (Musgu: TSL 1986: 198) | PMasa \*but “to separate” [GT]: Masa bût “1. (tr.) séparer, 2. (intr.) se séparer, divorcer, 3. (tr.) [bût gīnā] détacher, découdre (litt.:

<sup>25</sup> M.L. Bender (l.c.): cf. Bantu \*ba(n)d- (sic), but no meaning was given. In fact, he may have referred to Bantu \*-bād(ud)- and \*-bānd- “to split (tr.)” [Guthrie 1971: 118]

<sup>26</sup> Equated by L. Reinisch (l.c.) with NAgaw: Bilin fātāt (no meaning).

<sup>27</sup> Combined by E. Cerulli (l.c.) with NAgaw: Bilin bāt “esser spaccato”, Hamir bāz “spaccare”.

<sup>28</sup> Attached to dubious Chadic *comparanda* along with the correct Vulum one.

séparer vers l'extérieur" [Caïtucoli 1983: 53], Gizey/Wina, Masa, Ham, Musey, Lew, Marba bût "déliér" [Ajello et al. 2001: 19], Marba bût "démolir" [Ajello et al. 2001: 20], Zime-Misme bût "to detatch" [Jng. 1978: 15] | Lame bût "1. détacher, 2. (se) dérouler, 3. démêler", + zèd mbráo („corde, vêtement") "4. découdre" [Sachnine 1982: 280], Zime-Dari pût "détacher, dérouler, démêler" [Cooper 1984: 21] || Sem. \*√bdd "to separate" [Ehret] = \*bud- (sic) "1. to take away, 2. separate, 3. disperse" [OS in HSED]: Akk. (NAss.) √bdd D "vergeuden, verschleudern" [AHW 95] || Ug. bd "separation, isolation" [DUL I 214] = "wegnehmen (?)" [WUS 46, #496], adopted as "to take away" (sic) [OS in HSED] | Hbr. √bdd "einsam sein" [WUS], adopted as "to separate" [OS in HSED] | Ar. √bdd I "1. he parted (his legs), straddled, 2. he removed far away, withdraw, drew away with, refrained, abstained from" [Lane 160] = "1. séparer, 2. écarter (les pieds), 3. éloigner, renvoyer qqn. et le tenir dans l'éloignement, l'empêcher d'approcher" [BK I 92] = "trennen, entfernen" [AHW] = "zer/verteilen" [WUS], adopted as "to separate" [OS in HSED] || MSA \*√bdd "to separate, sever" [Johnstone 1977: 15; 1981: 22; 1987: 42] etc. < PAA \*bad- "to separate" [OS in HSED] = \*-pā/d- "to break off" [Ehret 1995] = \*-p/bād- "to cleave" [Ehret 2000]. A better-known AA root with just some minor additions here.<sup>29</sup>

**Ad OmAA IV #88. NOm.: Sheko badú** "brother" [Aklilu in Bender 2003: 207, #21: isolated in Om.] || WCh.: Boghom pambēt [Gowers] = pānpāt [Shimizu] "brother" (WCh.: JI 1994 II 48) || presumably NBrb.: Nefusa batti "tante paternelle" | Mzab, Wargla betti "tante paternelle, soeur du père" (NBrb.: DRB 135, BT11: isolated in Berber) < PAA \*√bt "brother" [GT]. The North Berber root was affiliated by O.V. Stolbova (CLD VI 50, #57) with her Ch. \*bVt- (pl.) "sisters, clan", \*bVwVt- "sister" [CLD]: WCh.: Fyer bèt (pl.) "Geschwister (siblings)" [Jng. 1970: 83] || Toram bōt "sister", bèeta "clan" [Alio] | Sakun bwota "closely cooperating group of people" [CLD] || CCh.: Bidiya boote, pl. sèney "soeur" [AJ 1989].

**Ad OmAA IV #89. NOm. \*bed- (var. \*bod-?)** "1. to reach, 2. arrive, 3. suffice" [GT]: Gimirra \*byedi "to arrive" [GT]: Gimirra-Benesho biedi "arrivare" [Montandon in CR 1925: 618] = both Benesho and She bièdi "to arrive" [Bender pace Montandon > CR] (Bender 2003: 161, #27: isolated in NOm.!) | Shinasha (Janjero) bod- (imper. stem: bōr-) "1. genug sein, 2. ausreichen" kept distinct from bōd- (imper. stem: bór-) "1. ankommen, 2. erreichen" [Lamberti 1993: 281] | Kafa Kafa bédde "it is enough", bedáche "it is not enough" [Beke] = bèdihè "bastante, sufficiente" [Cecchi] = bad "genügend vorhanden sein" [Reinisch 1888: 270]<sup>30</sup> = bed "1. giungere, 2. potere, 3. essere per ..., stare per ...

<sup>29</sup> The Kefoid-Sem.-Sidamo match was first published in HSED 43, #171, whereas the Mocha-Sem.-ECu.-WCh. comparison was first suggested by Ch. Ehret (1995: 114, #104; 2000 MS: 2, #1029 and 53, #1261) and Vulum-Sem.-Sidamo (with dubious Chadic *comparanda*) by O.V. Stolbova (CLD VI 40-41, #29). The rest of the Chadic cognates were added by myself here.

<sup>30</sup> Whose primary sense was rendered significantly otherwise by L. Reinisch (l.c.), although the older records cited in his own entry are clearly indicative of the true basic sense in Kafa (which can only corroborate the careful interpretation with the manifold semantical shifts offered by E. Cerulli, l.c. *supra*, and our comparison with the West Chadic cognates carrying the same shift from "to reach" to "to suffice"), namely: "reichlich vorhanden sein", bádi-te (refl.) "reichlich werden, sich vermehren", which is pretending as if the primary sense

(ausiliario per la coniugazione perifrastica), 4. esser conveniente, convenire, 5. bastare, esser sufficiente, 6. essere a punto per ...” [Cerulli 1951: 410-411], Mocha ’bāddi(yé) “1. to arrive, 2. join, touch, 3. be enough” [Leslau 1959: 21] | Sheko bed(d)- “1. genug sein, 2. ausreichen” [Lamberti 1993: 281]: in the former discussion over this Omotic root (OmAA IV #89.), beside West Chadic, only Semitic cognates<sup>31</sup> were suggested whence a cognate root \*√bdh “to arrive suddenly” (or sim.) seems to emerge in the latter branch. Not disputing an eventual cognacy thereof, esp. with regard to NOM. \*bed- (var. \*bod-?) “1. to reach, 2. arrive”, there seems to hide an isolated reflex of NOM. \*bed- (var. \*bod-?) “3. suffice” in Sem.: Ar. badad-, badd-at-, bidd-at- “power or ability (to do sg.)” [Lane 162a] = bidd-at- “pouvoir” [BK I 93] = badd-at-, qqf. bidd-at- “moyen, capacité, force / means, capacity, strength” [DAFA 434b].<sup>32</sup> All this may suggest that the full semantic spectrum of the PAA root has until now much better preserved in Omotic, whereas in Semitic has long been merely retained in its fossilized fragments.

**231. PGimirra \*bod-** “road, path” [GT]: Gimirra (variety of Benchnon?) bod-i/e [Montandon] = bod [Fleming, Breeze] = bōd [Bender], She bod [Fleming, Muldrow] = bode [Montandon] (Gimirra: Bender 2003: 172, #108) | Kefoid: dubious reflex<sup>33</sup> || CCh.: Musgu \*futi [GT: \*fu- regular < \*bu-] “way” [GT]: Musgu fití, pl. fatakáí (Krause), futii (Barth), fitti (Overweg), futi (Décorse), -fti- in taftída (Rohlf) “Weg” [Lukas 1941: 54], Mulwi-Katoa fūfū, Mogrum fūfū: “chemin” [Jng. 1971/2 MS 0-1], Munjuk-Puss fētiy (f) “route, chemin, voie” [Tourneux 1991: 87], (???) Mbara tîfāy (f), pl. tîfāàfā (metathesis???) “route” [TSL 1986: 278].

**231.1.** The same AA root appears in a triradicalized form in LECu.: Somali budul “(beaten) path, track” [Ehret, not found in Reinisch 1895; Abraham 1964; Ehret & Nuuh Ali 1984; FH 1993] || ECh.: Dangla-Migama \*botol “way” [GT]: WDangla bōtōl “chemin, route” [Fédry 1971: 93], EDangla bōtōl “chemin, route” [Dbr.-Mnt. 1973: 52], Migama bōtōl (m), pl. bōttōllī “chemin, route” [JA 1992: 71], Bidiya bōtōl, pl. bōtōltile “empreinte, sentier” [AJ 1989: 60], cf. Mokilko bōtīlē “trace laissée dans les herbes par le passage de gros animaux ou d’hommes” [Jng. 1990: 68] | Mubi-Toram \*botol “way” [GT]: Mubi bōdōl (m), pl. bōdōlūl [-d- < \*-t-] “Weg” [Lukas 1937: 181] = \*bōdōl “road” [Bender-Doornbos] = bōdōl (m), pl. bōdōlūl “route, sentier, chemin” [Jng. 1990b MS: 5], Minjile \*bōdōl “road”

were \*‘to abound’. Reinisch’s Tigre parallel (signifying “abundavit”) is also quite suggestive. That was also the idea of M. Lamberti (1993: 281), which would mislead us towards an entirely different AA root, cf., e.g. SOM. \*bEd- “many” [GT]: Bako bedi-mi, Ubamer and Galila bedi “viele” (SOM.: Mukarovsky 1981: 200, #10) || HECu.: Sidamo bat-a “Reichtum, Überfluß” [Lamberti l.c. supra] etc., whose AA background was discussed in part I of this series (entry #1). See OmAA I entry no. 1 with a discussion for SOM. \*bEd- “many” [GT].

<sup>31</sup> Sem.: Ar. √bdh I: badiha “arriver à l’improviste, survenir inopinément, avoir lieu d’une manière inattendue; surprendre qqn.” [BK: I 98] || ES: Tigre (tə)-bāddāhā “recevoir un cadeau inopinément” [DRS: 45].

<sup>32</sup> Rendered in DAFA from Ar. √bdd C carrying the “notion de base: partage, répartition (sharing out, distribution)”.

<sup>33</sup> Cf. Kefoid \*bočč-o [< \*\*bod-čō??] “road, path” [GT] > Kaffa bočč-ō “via” [Cerulli] = bōč-ō “Weg, Straße” [Reinisch 1888: 271] = bōč-o “way (road)” [Beke apud Reinisch l.c.] = bōč-o [Fleming: as Boshā, Lewis], Mocha bōč-ō [Bender] < (???) NOM. \*bod- “road, path” [GT]. Note that E. Cerulli (1951: 410), in turn, equated it with Chara bok-ā “via” (palatalization of \*-k-č- in Kafa?).

[Bender-Doornbos] (MT: Bender-Doornbos 1983: 77, #65) < SAA \*butul (?) “way” [GT]. Ch. Ehret (2000 MS: 2-3, #1032) combined the Somali term with Ch. \*√bd(m) “path” [JS 1981: 210A<sub>1-2</sub>], but he did not specify the reflexes in the Chadic daughter languages.<sup>34</sup> The ECh.-NOm. match is due to G. Takacs (2009d: 332, #50).

**232. POm. \*bud-** “heart” [Blažek] = **\*būd-** “heart” [GT] > Basketo buda [Alemayehu Haile] = ’būda [Bender] = būdi [Fleming], Doko būda [Fleming apud Blažek] – all denoting: “heart” (Basketo: Bender 2003: 18, #69) || SOm./Aroid \*būd “heart” [Bender 2003: 211, #69]: i.a. Ari būdi “1. breast, 2. heart” [Hayward, so also Bender in Bender 2003: 206, #18], Galila būda “heart” [Fleming apud Blažek], Dime būd “heart” [Bender, Fleming] = būd [Bender apud Blažek] (Aroid: Bender 1994: 152, #40; Basketo + Aroid: Bender 2003: 240, #69) || CCh. \*√-bd (extended by prefixes) “heart” [JS 1981]:<sup>35</sup> Bachama hūbòtò, Mwulyen hūbòtì, Gudu móbūd “heart” (Bata group: Kraft apud Blažek) | Gidar bide “breast” [Mouchet in JI 1994 II 47] || SBrb.: Ahaggar ā-bāda “3. sein (creux d’une personne couchée)” [Foucauld 1951-2], EWlmd.-Ayr ā-bada, pl. i-bada-n “2. sein” [PAM 1998: 3] (SBrb.: DRB 17, BD2: isolated in Brb.)<sup>36</sup> || Sem.: (???) Ar. ba’da/il-at- “1. partie entre la mamelle et l’aisselle chez l’homme, 2. mamelle (surtout la partie ...)” [BK I 78 adopted in DRS 40, b’dl2]<sup>37</sup> vs. bahdal-at- “sein, pectoraux” [DRS 47, bhd11], cf. bahdala (denom.?) “avoir la base des mamelons large” [BK I 78] < PAA \*bud- “heart” [Blažek] = \*√bd “1. breast, 2. heart” [GT]. Areal (?) parallel in PBantu \*-bēdè “breast” [Guthrie].<sup>38</sup> The Aroid-CCh.-Ahaggar match is due to V. Blažek (1989 MS Om., 18-19, #61) and independently Ch. Ehret (2000 MS: 3, #1033), who both, besides, carefully avoided to compare to the reflexes of the following root:

**232.1. PAA \*√ph<sup>w</sup>d ~ \*√pūd** “heart” [HCVA] > Sem.: Ug. pīd “gemütsvoll” [WUS 252, #2183] = “sincere, cordial” [HCVA] = pīd “1. heart, 2. (hence) feeling, emotion, goodness” [DUL 658] | Ar. fu’ād-, pl. ?af’id-at- “1. (en gén.) viscères qui tiennent à l’œsophage, comme le cœur, le poumon, le foie, 2. cœur (siège du courage), 3. cœur, esprit, âme (syn. qalb-, ḥāṭir-, nafs-)” [BK II 528] = fu’ād- “the heart of man and of an animal other than man”, fawād- “heart” [Lane 2323 and 2456, resp.] = fu’ād- “Herz, Sinn” [WUS] = fu’ād-, dimin. fawād- “heart, mind” [HCVA] || WCh.: AS \*pūt (from \*puyt?) “heart” [GT]: Sura

<sup>34</sup> According to H. Jungraithmayr & K. Shimizu (l.c.), the biliteral root (A<sub>1</sub>: \*√bd, occasional ext. \*-l) occurs in WCh.: Buli (?), CCh.: Chibak, Kotoko, Musgu and Masa groups, ECh.: Mubi, whereas the trilateral one (A<sub>2</sub>: \*√bdlm) in WCh.: Tsagu, Bade, CCh.: Mandara group, ECh.: Somray and Sokoro (?) groups.

<sup>35</sup> Meant by H. Jungraithmayr & K. Shimizu (l.c.) to be PCh., since they equated the Bata group forms with Kotoko and the Sura one (see entry #232.1. below).

<sup>36</sup> Apparently meant in Berber lexicography to be a secondary sense of the homophonous word denoting in Ahaggar “1. pied des pentes (relief), 2. région qui s’étend au pied ...” and EWlmd.-Ayr “1. pied d’une pente”, resp. (cf. DRB l.c.).

<sup>37</sup> Apparently segmented by M. Cohen (1947: 172, #383) into an infix -ʔ- (which was, however, not the case regarding the variety with -h- quoted above) + primary \*√bdl (???) that he affiliated with ES: Tna., Amh. darat “poitrine” (Cohen: \*√db/mr “avec amouissement de la labiale?”), Brb. \*√dmr “poitrine”, and even Eg. bnd.t “sein, mamelon”, which are here phonologically out of the question as *comparanda*.

<sup>38</sup> Combined by M.L. Bender (1975: 155) with Eg. bn.t “bosom”, Fula end- and even PIE \*b<sup>h</sup>reud- “breast”, which are phonologically out of the question, let alone for the question of genetic links among these phyla.

pùut “Herz” [Jng. 1963: 79] (Takacs 2004a: 293: isolated in AS)<sup>39</sup> || ECh.: Tumak pòdpòd “poumon” [Caprile 1975: 91]. Sem.-Sura-ECh.: HCVA I 19, #39; HSED 430-431, #2016. This Arabo-AS etymology was adopted by Ch. Ehret (2000 MS: 33, #1167) also, albeit with a strange further segmentation.<sup>40</sup>

**233. SOM.: Dime bidduk** “small, little” [Bender in Bender 2003: 217, #120: isolated in Aroid and Om.] || CCh.: Muktele bížigá, Mofu bizáhà “little” (Mafa-Mada: Rossing 1978: 284, #431) || Sem.: Ar. baḏq- and bayḏaq- “small and light or active” [Lane 174] = baḏq- “léger, de peu de poids (small, light, weighing little)” [DAFA 480, col. b, so also in DRS 47, BDQ2: isolated in Sem.] < PAA \*√bžk (?) “small” [GT]. The case of Dime -dd- < AA \*-ž- should, of course, still be demonstrated. Maybe a trilateral extension of the AA root \*\*√bž “small” [GT] attested in NBrb. \*√bz “child” [GT, cf. DRB 147]? Any other etymological approach is less credible:

**233.1.** Related to Ch. \*√db “small” [JS 1981: 238, B<sub>1</sub>: only in Boghom and Kotoko] via metathesis and on a biradical basis?

**233.2.** Any connection to NBrb.: **Shawya ftuttek** “être cassé en petit (sic) morceaux” [DRB 669, FTK3: isolated in Brb.?] <sup>41</sup>

**234. NOM.: Kafa badàno** “inutile” [Cecchi apud Reinisch] = **badan** “unnütz, vergeblich, eitel sein, ausser Gebrauch kommen”, denom. Refl.: badanē-te “unbrauchbar, untauglich werden” [Reinisch 1888: 270] = bedánō (adj.) “1. sconveniente, 2. inutile” [Cerulli 1951: 411]: etymology disputed in the older sources.<sup>42</sup> Still, if this is not an inner Kafa derivation but an isolated relict from SAA, cf. PCh. \*√bt “useless, vain” [GT] > WCh.: Angas-Sura \*b<sup>y</sup>at ~ \*b<sup>y</sup>et (?) “useless” [GT]: Mushere kə-bat “useless(ness), in vain” (≈ Hausa bǎnzǎá “uselessness”, Abraham 1962: 76) [Diyakal 1997 MS: 283], Goemay biet “useless, worthless” [Sirlinger 1937: 14] (AS: Takacs 2004a: 24) || CCh.: Hdi bətbət “in vain” [CLD].<sup>43</sup>

**235. NOM. \*buḏ-** “bush” [GT]: Yemsa \*buḏ-u<sup>44</sup> “1. bush, 2. forest” [GT]: Yemsa (Janjero) buḏu, buru [GT: -r- < (\*)-ḏ-?] “bosco” [Cerulli 1938 III 70]<sup>45</sup> = bur’ù (GT: -r’-

<sup>39</sup> Practically, no cognates were found within AS. The Russian authors (HCVA I 19, #39; HSED 430-431, #2016) quote a certain Angas puut “heart” also, but such a form has not been recorded in the Angas wordlists known to me. Cf. perhaps Montol put-ta “to upset” [Ftp. 1911: 221] (lit. “the heart falls”, cf. AS \*tāz “to fall”)? Metathesis from AS \*tuṛyup “heart” in Sura?

<sup>40</sup> He assumed in both the Arabic and Sura forms extended reflexes of AA \*-pū? “to pound (intr.)” based on a simplex like SCu.: Ma’a -pū?u “to thunder” [Ehret 1980a, 145, §I.B.23], which is impossible.

<sup>41</sup> K. Nait-Zerrad (DRB l.c.) regarded this as a “formation expressive sur 2”, i.e. Brb. \*√ftk “ouvrir etc.”.

<sup>42</sup> The Sem. parallals (from Sem. \*√btl) adduced by L. Reinisch (l.c.) are phonologically out of the question. It was treated by E. Cerulli, in turn, on fully Kefoid grounds: he regarded it as a “relativo negativo di *bed*”, i.e., another root meaning “1. giungere, 2. potere, 3. essere per ..., stare per, 4. essere conveniente, convenire, 5. bas-tare, esser sufficiente, 6. essere a punto per ...”. It is a question if the latter derivation < \*bed-an- is correct and agreeing with the Kafa morphology.

<sup>43</sup> Miscompared in CLD VI 50, #58 with alleged reflexes of a supposed Ch. \*bVwVt- “distress, failure”.

<sup>44</sup> For the presumed Yemsa rule of -r’- < \*-ḏ- see entries #235, #236 and #237 below.

for \*-ḍ-?) “Wald” [Lamberti 1993b: 333: isolated in Om.]<sup>46</sup> | (?) Shinasha boddà (sic: -dd-) [GT: -dd- < \*-ḍ-?]<sup>47</sup> “Busch” [Lamberti 1993a: 281] (Yemsa: Bender 2003: 338, #9: isolated in Om.) || perhaps LECu. \*bḷḍ- “uncultivated field” [GT: provided < \*“(thickets” area”]: Afar bōdha “Feld” [Lamberti: -dh- < \*-ḍ-], Oromo baḍe “unbebautes Feld, Flachland” [Lamberti]<sup>48</sup> (Sns.-LECu.: Lamberti 1993a: 281)<sup>49</sup> || NBrb.: Shilh ta-buḍa “jonc de marais” | Qabyle ta-buḍa “jonc des marais” | Mzg. (Maroc Central) a-buḍa “esp. de roseau avec lequel on fait des cabanes et des treillis” (NBrb.: DRB 29, bḍ15) || Sem. \*√bws: Akk. buṣinnu, buṣīnu, biṣinnu “1. (a plant), 2. lamp, wick” [CAD b 348a] = būṣīn-, buṣinn- “1. mèche, 2. molène, bouillon blanc (plante)” [DRS] || Syr. būṣīnā “bouillon blanc”, Pehlevi Aram. bwṣyn “espèce de concombre”, Mandaic buṣina “citrouille” | Ar. būṣ- (coll.) “roseaux” [DRS] = “tiges sèches du maïs, dont on fait des grillages pour les balcons et les jardins” [BK I 178] = (coll.) “1. roseau(x) (d’Égypte dont on fait des calames, des claies, etc.) / (Egyptian) reeds (gen., from which pens, hurdles etc. are made), 2. inflorescence (d’une plante herbacée?), 3. B: pousse, cœur d’une touffe de sparte / shoot, heart of a tuft of esparto grass, 4. LPM: inflorescence de l’alfa / inflorescence of alfa-grass” [DAFA 916] = “1. (coll.) nom d’unité à, nom applicable à tous les roseaux, mais plus particulièrement à l’arundo aegyptiaca, qui fournit de ‘kalams’ à bon marché les écoles de l’enfance, 2. roseaux, cannes, roseaux à nœuds” [Dozy I 127-128] (Sem.: DRS 52, bwṣ2)<sup>50</sup> < PAA \*buḍ/ḥ- “1. reed thicket (?), 2. bush zone” [GT].

**Ad OmAA IV #178.: NOM.: PYemsa \*bōḍ- (???) “earth” (?) [GT] > Yemsa bōrʔa** “1. Grund, 2. Ursache, 3. (Postposition, die den Genitiv regiert) wegen” [Lamberti 1993b: 333: isolated] = “earth” (sic) [Lamberti’s alleged gloss apud Bender 2003: 340, #24: isolated]: both authors’ failure in any way affiliating the word in Omotic may easily be resolved by understanding the presumed Yemsa rule of -rʔ- < \*-ḍ- (apparent from entries #235

<sup>45</sup> Affiliated by E. Cerulli (l.c.) with NOM.: Wolayta and Zala worā and HECu.: Hadiya wor, which is phonologically vague.

<sup>46</sup> Curiously, M. Lamberti (l.c.) failed to find any of its cognates in Omotic.

<sup>47</sup> If, however, its C<sub>2</sub> originated from plain \*-d-, its etymon may be rather affiliated (as a PAA root variety?) with PAA \*√pd “wooden plank (?)” [GT]: Eg. pd (wood det.) “une partie du navire” (*hapax*, CT V 74u and 74cc, AL 78.1543) = “\*Deck (des Schiffes)” (GHWb 299) = “decking” (DCT 143) || NBrb.: (?) Mzab ta-fedfad-t “1. bourre de palmier, 2. plaques de cette bourre” [Delheure 1984: 47; DRB 525: isolated] | Qabyle a-fud, pl. i-fud-en “bout de branche mal coupé, moignon de branche coupée qui reste sur un bâton, un manche” [Dallet 1982: 191] || NOM.: Badditu fadē “bosco” [Cerulli 1929: 61] || WCh.: SBAuchi \*pit “1. tree, 2. wood” [GT]: Boodli, Kir and Laar (Balar) pīt, Zaranda pātī, Dikshi (Baraza) butā, Bandas bāta, Wangday putā, Dwot pēt (SBAuchi: Shimizu 1978: 33 and 49, #55) | Tangale pīdo “tree, log, plank, wood” [Jng. 1991: 131], Tangale-Waja pīdo “tree, wood” [Kwh. 1990: 101] | Bade pāt-ān (f) “Busch” [Lukas 1968: 222, also 1974-5: 104], Ngizim pātā, pl. pātātīn “bush” [Schuh 1981: 132] || ECh.: Somray áábdee “Baum, Holz” [Lukas 1937: 76]. Cf. EDE II 539; EAAN I 75, #334.

<sup>48</sup> Hard to localize in Oromo lexicography. Is Oromo badda “paese alto, regione fresca” [da Thiene 1939: 28] = baddā highland” [Gragg 1982: 30] meant here? If so, certainly out of the question in this context.

<sup>49</sup> The Shinisha word was combined by M. Lamberti (l.c.) with further dubious comparanda via metathesis like NOM.: Wolayta, Gamu, Dache demba “Flachland”, HECu.: Kambatta dubbu and Hadiya dubbo “Busch”, Sidamo dubo “Wald”.

<sup>50</sup> The DRS l.c. did not exclude a connection to Sem. \*būṣ- “byssus”.

above and #236-#237 below), cf. NOM. \* $\sqrt{\text{bwṭ}}$  “earth” ~  $\sqrt{\text{byṭ}}$  “sand” [GT] || NBrb. \*a-buḍ “fond” [GT after DRB 28-29, bḍ10] (provided < \* $\sqrt{\text{bwṭ}}$  “earth” < \*\* $\sqrt{\text{bwṭ}}$  “dust”) || Sem.: Ar.  $\sqrt{\text{bwṭ}}$  I: bāṭa “tomber dans la poussière” [DRS 51, bwṭ1: isolated] < PAA \* $\sqrt{\text{bwṭ}}$  “1. earth, 2. ground, bottom” [GT]. For the details see OmAA IV #178. This is why the Yemsa term should be thus detached from NOM.: Mao-Bambeshi mbōre “dust” [Atieb & Bender apud Bender 2003: 354, #23: isolated in Mao] || SOM.: Dime būlú [-l- < \*-r-] “dust” [Mulugeta 2008: 224] < NOM. \*bor(?) “sand (?)” [GT] (contrary to our earlier suggestion in OmAA V #162) as well as from PAA \* $\sqrt{\text{br}}$  “down, ground” (or sim.) [GT] (in spite of the very attractive parallel in CCh.: Gisiga vur ~ vōr ~ vr “1. Grund, 2. Ursache, 3. wegen, weil, denn, 4. um zu, damit” [Lukas 1970: 138] suggested in OmAA II #35).

**236. NOM.: PYemsa \*buḍ- (???)<sup>51</sup>** [GT] > Yemsa burʾa “Penis” [Lamberti] || LECu.: Afar buḍḍ-e (f) “penis” [PH 1985: 139]<sup>52</sup> = Saho-Afar buddhe “Penis” [Lamberti: -ddh- < \*-ḍ-] | Oromo bittoʾ “penis” [Lamberti]<sup>53</sup> > SOromo dialects biṭi “penis” [Stroemer 1987: 274] (Yemsa-LECu.: Lamberti 1993b: 333)<sup>54</sup> || NBrb.: Shilh a-bazṣa “verge (membre viril)” [DRB 155, bz7: isolated in Brb.]<sup>55</sup> || Sem.: NSyr. (?) būṭā [-ṭ- regular < Sem. \* $\sqrt{\text{ṭ}}$  < AA \* $\sqrt{\text{ṭ}}$ ] “pénis” [DRS 51-52: dubious Sem. etymology]<sup>56</sup> < PAA \* $\sqrt{\text{bṣ}}$  “genitalia” [GT]. For further members of this wide-ranging PAA root family see entry no. 153 in my parallel paper “Mubi-Toram Lexicon and Afro-Asiatic III” on the pages of this LP issue.

**237. NOM.: PYemsa \*buḍ- (???)<sup>57</sup>** “child” [GT] > Yemsa burʾ(ʾ)ussi (nur als Plural belegt) in: burus-ni kit/yó “Kinder, Buben”, burussí-sà kit/yó “die Kinder, Buben” [Lamberti 1993b: 333: isolated in Om.] || LECu.: Saho and Afar báḍ-ā, fem. -ā “Kind: 1. Sohn, Tochter, Knabe, Mädchen, 2. bei Tieren das Junge” [Reinisch 1886: 829-830; 1890: 83-84]<sup>58</sup> = Saho barha “son”, barhā “daughter” [Vergari 2003: 53] = Afar báḍ-ā “figlio”, fem. bāḍ-ā “figlia” [Colizza 1887: 112] || NBrb. \* $\sqrt{\text{bz}}$ : Wargla ta-bṣa “marmaille, enfants, jeu-

<sup>51</sup> For the presumed Yemsa rule of -rʾ- < \*-ḍ- see entries #235 above and #237 below.

<sup>52</sup> Equated by Ch. Ehret (1995: 112, #101) with Ar. bazṣ- (verbal noun) “to grow fat” and NOM.: Bench(non) pūḥ “many, much” < AA \* $\sqrt{\text{pūḥ}}$  “to increase (intr.)”.

<sup>53</sup> M. Lamberti (l.c.): “Entsonorisierung des Ejektivs” in Oromo.

<sup>54</sup> Whence M. Lamberti (l.c.) set up an “altkuschitische” stem \*b/muḍ- “penis” which he eventually derived from the homophonous verbal root “sprossen” assuming an interchange of \*b- vs. \*m-.

<sup>55</sup> Affiliated by K. Naït-Zerrad (DRB l.c.) with a phonologically apparently distinct root, cf. EBrb.: Ghadames ta-baḥṣuṣṣ “queue d’animal (cheval, chacal)” [Lanfry 1973: 7, #43] || SBrb.: Kel Ui ta-basus-t “queue” [DRB] || NBrb.: Shilh a-baṣṣa ~ a-ṣabba “queue (d’animal)” [DRB] | Tamazight a-baṣṣa, pl. i-baṣṣ-iw-n “queue (d’animal)” [Taïfi 1991: 35] = a-bassa ~ a-baṣṣa ~ ta-bzza-t [DRB] (Brb.: DRB 130, 133, 148).

<sup>56</sup> Cf. Sem. \* $\sqrt{\text{bawṣ}}$  “bottom” [GT]: Mandaic buṭa “bottom, anus (still used)” [Drower-Macuch 1963: 54] = “anus, derrière” [DRS 51], NSyr. būṣā “croupe” (borrowed < Ar.) [DRS] | Ar. būṣ- “fesses” and bawṣ- “3. chairs grasses et molles de fesses”, cf.  $\sqrt{\text{bwṣ}}$  II (denom.) “avoir les fesses très-grandes” [BK I 178] = būṣ- and bawṣ- “croupe saillante, callypigie” [DRS], cf. also Ar. buṭṭuṭ- (root ext. -ʿ- and -ṭ-?) “2. fondement, derrière avec les parties de la génération” [BK I 140].

<sup>57</sup> For the presumed Yemsa rule of -rʾ- < \*-ḍ- see entries #235, #236 above.

<sup>58</sup> Of course, neither of the comparisons (Somali wil or Macro-Canaanite \* $\sqrt{\text{bn}}$ , \* $\sqrt{\text{br}}$  “son”) offered by L. Reinisch (1886: 829) is phonologically convincing.

nesse”, Figuig a-bziḡ “garçon”, Snus l-bezz “marmaille”, a-bzeḡ “petit enfant” | Tamazight bezz (var. de bezz) “enfanter” (NBrb.: DRB 155, bz11: var. to \*√bz?) < PAA \*√bč “2. offspring, child” [GT].

**238. SOm.: Ari** \*√bḏ “to go” [GT]: Ari bāḏa [Bender] = bad- ~ ba?- [Tully] = biḏ- [Ehret]<sup>59</sup> (Bender 2003: 210, #59) || PCh. \*√bt “to go” [GT]: WCh.: Warji bátá [IL] || CCh.: Gudu pīt [IL] | Gidar mbat [Mouchet] (Ch.: JI 1994 II 162-163). Irregular SOM. \*-ḏ- vs. Ch. \*-t-. To be distinguished from Sem.: ES \*√bṣḥ [DRS] > Geez baṣḥa, Tigre bāṣḥā, Tna. bāṣḥe “ad/parvenir” (ES: DRS 77).

**Ad OmAA IV 131, #92 NOm.: Kafa bōṭṭā** “weak” [Lamberti apud Bender 2003: 344, #106: isolated in Kefoid/Om.]. So far, merely its Ghadames cognate (cited below under #92.2.) has become known from our previous communication. Now, we may outline the context of its root family by a whole series of additional comparative data as follows:

**92.1. PAA** \*√bṭ “1. feeble, 2. poor” [GT] > Sem. \*√bt “to be feeble” [GT]: Ar. √bṭṭ II baṭṭata “être fatigué”, cf. baṭīṭ- “3. malheur”, √bt? I baṭu’a “être lent, marcher ou agir avec lenteur”,<sup>60</sup> √bṭr IV “1. é mousser, 2. fatiguer” [BK I 134-136], presumably<sup>61</sup> also Ar. √bwṭ I: bāṭa “1. tomber dans la misère et l’avisement, ayant été riche et considérée” [BK I 178] = “1. tomber dans la misère / to be reduced to poverty” [DAFA 917] || ES \*√bwṭ: Tigre boč “faiblesse de la vue”, Amh. boṭābboṭā “1. é mousser, 2. se brouiller” (ES: DRS 51, bwṭ2) || SBrb.: Ahaggar √bḏw > i-bḏaw (conj. II beḏēw) “être chétif (peut avoir pour sujet de personne, des animaux, ou des végétaux)” [Foucauld 1951-2: 33; DRB 31, bḏ2: isolated in Brb.] || LECu.: Oromo bāḏḏa “unable to do sg.” [Ali & Zaborski 1990: 132] | HECu. \*buṭ- “to be poor”, buṭ-a “poor (one)” [Hudson 1989: 115, 407] || WCh.: AS \*ḥwet [regular < \*\*b<sup>w</sup>et/ç] “1. fine, 2. weak” [GT]: perhaps Mushere lek-li-ḥwet “describing the act of making one’s body flexible” [Diyakal 1997 MS], Goemay biet (so, -i-) “poor” [Ftp. 1911: 219] = ḥiet [reg. < \*ḥuet] (sg.) “to be weak (in strength or in class or for sg.)”, ḥiat [\*ḥuat] (pl.) “to be weak (to do sg.)” [Hellwig 2000 MS: 3-4] (AS: Takacs 2004a: 43) || CCh.: Mbuko ḥutoy “se faner” [CLD: < \*buṭ-]. The Ar.-Goemay-Mbuko match is due to CLD VI 48, #53.

**92.2. PAA** \*√bḥ “feeble” [GT] > Sem.: Ar. √bṣw II: baṣṣā “rendre eunuque”, baṣiyy- “eunuque” [BK I 133] = √bṣw I: baṣā “émasculer” [DRS 76-77, bṣw1: isolated in Sem.]<sup>62</sup> vs. Arab. baṣ- “maigreur”, baṣṣūṣ- “maigre et mince” [BK I 142] || EBrb.: Ghadames bāḡ “être épuisé (de faim, de soif)” [Lanfry 1973: 34, #0152] = bāḡ [DRB: 154, bz1: isolated in Brb.] || Ch. \*bVç- “to diminish, weaken” [CLD]: WCh.: perhaps AS \*ḥes “(to be) slow”

<sup>59</sup> Affiliated by Ch. Ehret (2000 MS: 565, #27) with Eg. bṭ “1. to abandon, forsake, 2. run” < AA \*-bič- (\*-tl’-) “to leave”. Phonologically untenable.

<sup>60</sup> Affiliated (with a question mark) in DRS 59 with ES: Geez baḏawa “dormir”, which is both phonologically (Ar. ṭ ≠ Geez ḏ) and semantically vague. Otherwise treated in DRS as isolated.

<sup>61</sup> Provided its root sense had to do with “poverty” and not “dust”, cf. its alternative rendering: Ar. √bwṭ I: bāṭa “tomber dans la poussière”<sup>61</sup> [DRS 51, bwṭ1: isolated]. Cf. the entry #238 in this paper.

<sup>62</sup> This fact led the eds. of DRS l.c. to assume a connection to Sem. \*√bṣṣ/- with the basic sense “couper, déchirer, fendre”.

[GT]: Angas bēs (hill dialect) “to dally” [Foulkes 1915: 149], Sura ḥes “langsam” [Jng. 1963: 60] vs. Mupun bées “not enough” [Frj. 1991: 7] (AS: Takacs 2004a: 32) | Tangale busi “feeble, weak” [Kraft > CLD] || CCh.: Lamang ḥaca “to diminish” [Wolff > CLD] | Chuvok méḥēčēy “effriter” [Ndokobai > CLD] | Dzepaw bàcè “faible” [Sachnine > CLD]. Ch.-Ar.: CLD VI 76, #157.

**92.3. PAA** \*√bt “feeble” [GT] > WCh. \*bVt(t)- “to be weak, tired” [CLD]: alleged Goemay reflex non-existing<sup>63</sup> | Bole mbutu “to tire out, be tired from” [Gimba] (WCh.: CLD VI 48, #53) || Sem.: Ar. √btt I “5. excéder de fatigue, surmener (une bête de somme), 7. être excédé de fatigue et exténué”, bātt- “1. amaigri, excédé et exténué de fatigue, 2. sot, 3. ivre” [BK I 81-82]. Ar.-WCh.: CLD l.c. supra.

**92.4. PAA (?)** \*√bd “1. feeble, 2. poor” [GT] may represent a root variety with a voiced C<sub>2</sub> preserved in Sem.: Ar. badd- “épuisement, fatigue (exhaustion, weariness)”, II (abst.) “tomber de fatigue, d’épuisement, s’effaiser, s’affaler (to drop with weariness, with exhaustion, collapse, sink down)”, V “dépérir, se délabrer (santé), s’épuiser, se fatiguer (to decline, become impaired of health, wear o’self out)”, mu-ta-baddad- “1. maigre, malingre, à la santé chancelante (thin, puny, in a delicate state of health), 2. exténué, épuisé, à bout de forces (exhausted, weary)” [DAFA 435-436] = mu-ta-baddid-at- “emaciated (woman)” [Lane 163, col. a] || ES: Tigre bad “pauvreté” [DRS 44, BDD1: isolated in Sem., semantically at least]<sup>64</sup> || LECu.: Oromo badada (syn. gadada) “to become poor” [Gragg 1982: 30].

**239. NOm.: Macro-Ometo** (proper language unspecified) **báta** “forehead” [Bender 2003: 198, #35: isolated in Om.] || Bed. bīti (f), pl. bītia “forehead” [Roper 1928: 165] || CCh.: Musgu bēdebēde, pl. bēdebēdakái “Stirn” (Krause) [Müller 1886: 393; Lukas 1941: 47] (GT: isolated in the Musgu group) || NBrb.: a plausible trace of a root variety with a voiced C<sub>2</sub>.<sup>65</sup> May a S/P???AA \*√bt, var. \*√bd “forehead (i.e., front part)” [GT] underlie? Etymologically presumably related to a verbal root:

**239.1. Sem./P???AA** \*√bd “to begin (originally: to be in front???)” [GT] > CCh. (GT: from Ar.): Chibak bàdī-číní and Bura badita “beginnen” [Hoffmann 1955: 133] || Bed. (GT: from Ar.?) bado “to begin” [Roper 1928: 159] || NBrb. (GT: from Ar.): Qabyle e-bdu “commencer” [Dallet 1982: 8] || Sem.: OSA bd? “première fois” [DRS], Ar. bada’a I “1. commencer, 2. faire qqch. le premier, être le premier à faire une chose, 3. créer, produire, inventer, 4. (avec bi-) préposer qqch. à qqch., le nommer chef” [BK I 94 > DRS] ||

<sup>63</sup> O.Stolbova’s Goemay byet (sic: b- and -y-) “1. to be too weak for smth., be too weak to do smth., 2. become weak or useless” [Hellwig apud CLD VI 48, #53] is due to misquoting Goemay ḥiet (so: implosive ḥ- and -t-, not an -i-) [regular < \*ḥuet], pl. ḥiat [< \*ḥuat] “to be weak (in strength or in class)” [Hellwig 2000 MS: 3-4], which can only be derived from \*√bwṭ via a glottal metathesis.

<sup>64</sup> In fact, the Tigre word was listed among in that DRS entry among semantically unrelated roots it was confused with.

<sup>65</sup> Cf. perhaps Qabyle budd “1. favoriser, avantager, 2. destiner qqch. à qqn. par faveur préférentielle, 3. souhaiter, vouer” [Dallet 1982: 5: Arabism?; DRB 17, BD2: isolated in Brb.]. For the semantical shift cf. the suggestion by A. Ember (1920: 63-63; JHUC 39, 697; ESS §14.a.20) who was inclined to affiliate Sem.: Hbr. ḥāzē and Aram. ḥadyā “breast”, Ar. ḥādā “to be over against, opposite to” and ḥidāʾun “opposite, over against” (displaying a semantic derivation “breast” > “front” > “opposite”) with Eg. ḥzj “loben, billigen” (OK-, Wb III 154-155) = “to praise, reward” (Ember: originally < \*“(to) place a thing over against an another thing”).

MSA \* $\sqrt{\text{bd}}$ ? “to begin” [GT]: Harsusi *bedō* “to begin”, *abēd* “to start (up)” [Johnstone 1977: 15], Jibbali (Shahri) *bde*? “commencer” [DRS] = *bédé*? “to begin” [Johnstone 1981: 22], Mehri *šebedú* “anfangen (commencer)” [Jahn apud DRS] = *əbtōdi* (CJibbali *əbtódé*?) “to begin” [Johnstone 1987: 42], Soqotri *béde* “commencer” [Leslau] (Sem.: Leslau 1938: 81; DRS 44, *bd*?1). Considering a series of Chadic forms “to begin” as Kanuri/Arabic loans, O.V. Stolbova (CLD VI 45, #44) equated the Sem. root with Ch. \*\**badVH*- > \**bađi* “dawn, morning”.

**240. NOM. \**bVtt*-/\*\**bV̄t*-** “1. earth, 2. dust” [GT]:<sup>66</sup> Macro-Ometo \**bitt*-a “earth” [Bender 2003: 198, #24] > NWometo \**bitt*-a “earth” [Bender 2003: 76, #24] > extended Wolayta cluster \**bitt*-a “earth” [Bender 2003: 47 and 326, #24]: a.o., Wolayta *bīta* “soil, earth, land” [Lamberti], Dawro *bīta*, *bitta* “dust” [Lamberti], Dorze *biyta* “dust” [Linton], Dace *biitta* “soil, land” [Lamberti], Zala and Gofa *bitta* “soil, land” [Lamberti], Gamu *bitta* “soil, land” [Lamberti], Basketo *bitt* [Fleming] = *bittā* “earth” [Cerulli in Bender 2003: 326, #24], Malé *bītā* “country” [Cerulli in Bender 2003: 326, #24], Malo *bitta* “earth” [Alemayehu] = *bīta* [Siebert & Caudwell], Zala *bittā* “earth” [Cerulli] (NWomt.: Bender 2003: 317, #24; Ometo: Bender 2003: 141, #24)<sup>67</sup> | Dizoid: Sheko *bōta* “dust” [Aklilu] (Dizoid apud Bender 2003: 347, #23: isolated) ||| Bed. *būt* (f) “earth, land” [Roper 1928: 165]<sup>68</sup> || Agaw \**bət*-a “land, country, soil” [Apl.]: Bilin *bəta* “soil, sand, filth”, Hamir *bəta* “soil” | Awngi *bətf* “earth” (Agaw: Apl. 2006: 59) ||| ECh.: Kajakse *būtūt* “sol” [Alio 2004: 240, #51].<sup>69</sup> Some remote root varieties of this PAA root family that have already been discussed elsewhere in our earlier communication (see in OmAA V #178 = Takacs 2022: 683-683, #178.1-2.):

**240.1. PAA \**buṭ*-** “1. earth, 2. sand” [GT] > NOM. \* $\sqrt{\text{bwṭ}}$  “earth” ~  $\sqrt{\text{byṭ}}$  “sand” [GT]: Dorze *biyta* “sand” [Linton et al.] = *bīt/ṭa* “sand” [Siebert] (isolated Ometo: Bender 2003: 22, #110) | Gimirra-Benesho (Bench) *bwit* “earth” [Fleming] = *buyṭ*<sup>1</sup> “soil”, *buyṭ*<sup>5</sup> “desert (n.)” [Wedekind 1990: 99] = *bwit* “earth” [Breeze] (isolated in Gimirra: Bender 2003: 339, #23) | PYemsa \**bōḍ*- (???) “earth” (?) [GT] > Yemsa *bōr’ā* “1. Grund, 2. Ursache, 3. (Postposition, die den Genitiv regiert) wegen” [Lamberti 1993b: 333: isolated] = “earth” (sic) [Lamberti’s alleged gloss apud Bender 2003: 340, #24: isolated] ||| (???) NBrb. \**a-buḍ*

<sup>66</sup> M. Lamberti (LS 1997: 325) derived the Omotic and Agaw forms from an “Old Cushitic” (Cushitic and Omotic) stem \**biy*- with the addition of a formative suffix, which, however, can hardly be projected onto the Chadic cognates.

<sup>67</sup> Combined by M.L. Bender (2003: 335) with HECu.: Gedeo *buttina*, Ch. \* $\sqrt{\text{bt}}$  “ashes” of JI 1994 I 3, and NS \**buT*-.

<sup>68</sup> The assumption by Roper on its connection with Bed. *būr* ... is phonologically vague.

<sup>69</sup> Derived by O.V. Stolbova (CLD VI 48, #54) from her Ch. \**but*- “soil, mud” [CLD], whose all further alleged reflexes, however, only reflect the sense “dirt”: WCh.: Tangale *bēdeke* “mud” [Kidda 1985: 201, #42] = *būdeke* “mud” [Jng. 1991: 73] = *budeke* “mud” [CLD < Kraft or Jng.?], Dera *būt* “filth” [Newman 1974] || CCh.: Bura *buta* “to fill in dirt for a floor or for grading a road” [Blench] (CLD: denom. verb). Doing so, Stolbova failed to distinguish between AA roots with plain \**-t*- (discussed by me elsewhere) whence her Chadic comparanda clearly derived: SAA \* $\sqrt{\text{bt}}$  “(to be) dirty” [GT in EAAN I 21, #19] vs. PAA \* $\sqrt{\text{btk}}$  ~ \* $\sqrt{\text{bdk}}$  “dirt” [GT in EAAN I 21, #23]. Whether both these roots are eventually akin to the AA root family for “soil” discussed in this entry, represents the matter of another dispute.

“fond” [GT after DRB 28-29, bđ10] (provided < \**“earth”* < \**“dust”*) || Sem.: perhaps Ar. √bwṭ I: bāṭa “tomber dans la poussière”<sup>70</sup> [DRS 51, bwṭ1: isolated] (provided < \**“dust”*).

**240.2. SAA \*fut-** “1. earth, 2. sand” [GT] with a voiceless *Anlaut* and plain *Auslaut* \*-tis represented by NOm.: Yemsa \*fūtu [unless its fu- < \*bw- as in Ch. *supra*?] “sand” [GT after Bender 2003: 172, #110] || CCh.: Muktele ftsú “earth” [Rossing 1978] | Musgu fūti (Rohlf), fetí (Overweg), fate (Décorse), fuuti (Barth) “Erde”, vgl. áfti (Rohlf) [Lukas 1941: 54-55], cf. perhaps also Musgu áfti “Boden, Kalk” (Rohlf) [Lukas 1941: 43], Munjuk-Puss aftiy (f) “terre, sol” [Tourneux 1991: 72].

**241. SOm.: Ari bita** “left(hand)” [Bender and Tully in Bender 2003: 213, #80] || ECu. \*bidḥ- “left side” [Sasse 1979: 16, 60]. The additional \*-ḥ in the East Cushitic cognate must be identical with the common AA nominal class marker of anatomical terms (Takacs 1997). So, one may safely assume it to have signified sg. like \**“left/bad/wrong hand”*. This suggests searching the roots of these terms in the following branches of a wider root family with a fundamentally negative connotation:

**241.1. P<sup>???</sup>AA \*√bd** “(to cause) 1. trouble, 2. harm” [GT]: Sem.: Ar. badda I “5. causer du dommage à qqn.” > badīd-at- “calamité, malheur” [BK I 92-93] = badda “iniuria affecit” [Reinisch] || LECu.: Oromo badā “bad, spoiled, evil” [Ali & Zaborski 1990: 132] || WCh.: Ngizim bádāwāi “one who is always getting into trouble” [Schuh 1981].<sup>71</sup>

**241.2. PAA \*√bt** “1. to (be) spoil(t), 2. be in disorder (mentally)” [GT]: Sem. \*√bt<sup>?</sup>/w [DRS]: (?) Ug. \*√bt(w) > t-bṭ “jaser, bavarder (?)”,<sup>72</sup> Hbr. √btw: bāṭa “bavarder, parler inconsidérément” (Can.: DRS 59, bt<sup>?</sup>/w1) || NBrb.: Wargla bbedḥbeḥ “se troubler, perdre le contrôle sur soi, perdre la tête”, Mzab biḍḍu “1. perdre la raison, 2. être, devenir fou” (NBrb.: DRB 29-31, bḥbḥ17 and bḥw1, resp.) || LECu.: Arbore beḍḍ (f) “evil, badness, worthlessness”, beḍḍ-aw- “to become bad, spoiled, dirty” [Hayward 1984: 347] || WCh.: Hausa bātá “to spoil” [Abraham 1962: 88].

**241.3. P<sup>???</sup>AA \*√bwt** “bad, trouble(some)” [GT]: Sem.: perhaps<sup>73</sup> Official Aram. bwt (substantive of unknown meaning, presumably: “trouble, distress” or “burden” or “shame”) [DNWSI 148] || WCh.: BT \*būti “trouble” [GT]: Bolewa buuti “unfortunate situation” [Gimba], Karekare buuti “distress, troubles” [Gambo-Karofi] = “Plage, Kummer” [Lukas]. Aram.-BT due to CLD VI 50, #58.

<sup>70</sup> It can belong here provided its root sense had to do with “dust” and not “poverty”, cf. its alternative rendering: Ar. √bwṭ I: bāṭa “1. tomber dans la misère et l’aviilissement, ayant été riche et considérée” [BK I 178] = “1. tomber dans la misère / to be reduced to poverty” [DAFA 917]. Cf. the entry ad OmAA IV 131, #92 in this paper.

<sup>71</sup> Connected by Ch. Ehret (2000 MS: 460, #3131) with Sem.: Ar. badda “to harm, injure” (correcting its attribution in Ehret 1995: #103) and WCh.: Ngizim bádāṛā “sorcerer” < AA \*bā/ad- “to harm”.

<sup>72</sup> Meaning uncertain. J. Aistleitner’s suggestion was quoted and regarded by D. Cohen (DRS l.c.) as “une interprétation douteuse”, who reports of further alternative ways of rendering the Ugaritic word: (1) Ug. t-bṭ “elle est vue” < \*√bt based on Gordon 1965: 371, #456 (DRS: “est aussi peu sûr”); (2) the whole context, i.e., bh btt ltbṭ wbh tdmmt ?amht, was rendered by A. Caquot and M. Sznyczer (in their *Textes d’Ougarit*) “ne voit-on pas ici la honte et l’inconduite des servantes ...”

<sup>73</sup> Unless, of course, it derives from Sem. \*√bwt “to feel shame” as implied in the DNWSI rendering.

**241.4. LECu. \*ba/it-** “to cause difficulty” [Ehret] > Somali bad “1. Übeltat, Schädigung jemandes, 2. (tr.) Böses zufügen” [Reinisch 1902: 71] = bad “blackmailing, extortion (Erpressung)” [FH 1993: 110] = bad “to impose constraint, make unhappy” [Ehret], Oromo bita “devil, fiend, mischievous person” [Ehret] (LECu.: Ehret 1997 MS: 14, #1074; 2000 MS: 16, #1096).<sup>74</sup> One wonders if the root family of HECu. \*bud-a “(one who has) evil eye” [Hudson 1989: 406]<sup>75</sup> can also belong here.

**241.5. S<sup>???</sup>AA \*√bt** “to err” [GT]: LECu.: Somali bādi “stray (verirrtes Tier)” [FH 1993: 110] ||l WCh.: Daffo-Butura fūt “sich verirren” [Jng. 1970: 214]

**241.6. P<sup>???</sup>AA \*√bt** “to be false” [GT]: Sem.: Ar. √bht I: bahata “2. calomnier qqn., lui imputer à tort et sciemment qqch., 3. mentir”, buht-(ān)- “calomnie, mensonge”, buhayt-at-and bahtar- “mensonge” [BK I 169-170] ||l Ch. \*bVt- “to deceive” [CLD]: WCh.: BT \*bāt-/batt- “to trick” [GT]:<sup>76</sup> Karekare bābāatu “to deceive, trick” [Gimba], Bolewa bāttaa “1. to trick; 2. scare” [Gimba, Ali and Madu Bah], Maka bètt- “to trick” (?) [Suzzi Valli] ||l CCh.: Buwal bāt “to deceive” [CLD] | Hdi batay “to plead, flatter” [CLD] | Mafa bét-, béd-, pét- “amadouer qqn., tromper” [Brt.] | Musey mbaḍta “1. flatter, tromper; 2. la tromperie” [Shryock, Palomo and Martin] (W-CCh. data with sources: CLD VI 46, #50) ||l ECh.: Mokilko bútte “faux, mal préparé” [Jng. 1990: 70].<sup>77</sup> Variety with a voiced C<sub>2</sub> in Sem.: MSA \*√bdw “to tell a lie” [Ehret].<sup>78</sup>

**242. NOm.: Sheko búť** “to throw” [Aklilu apud Bender 2003: 352, #103: isolated in Dizoid] ||l WCh. \*√bt “to throw, shoot” [GT]:<sup>79</sup> Bure bet- “to throw, shoot” [CLD < ?] | Miya bēta “to throw, shoot” [Skinner] < SAA \*√bt “to throw” [GT]. May be part of a larger root family:

**242.1. Sem.: MSA \*√bdd** “to throw (a stone in a game)” [GT]: Harsusi bed “to throw a stone” and Mehri √bdd > bēd “to throw (a stone) in the game called bēdūn, throw any stone”, bēdūn “1. the target in a stone-throwing game, 2. the stone-throwing game itself (in the game tow or three boys throw stones from a fixed point at one of two targets)” [Johnstone 1977: 15; 1987: 42].

<sup>74</sup> Combined by Ch. Ehret (1997 MS: 16, #1074; 2000 MS: 16, #1096) with Eg. bt3 “wrong(doer), crime” < AA \*ba/it- “to cause difficulty for, harm”. This may indeed be correct on a triradical basis in the context of an equally wide range variant roots, for which see EDE II 348-349.

<sup>75</sup> Combined in HSED 62, #247 with WCh.: Ngizim bádàrà “sorcerer”, Agaw \*bawVd- “1. witch-doctor, 2. werewolf”, LECu. \*bawVd- and Kefoid \*bud-a “witch-doctor” < AA \*bawVd- “sorcerer”.

<sup>76</sup> O.V. Stolbova (CLD I.c.): compensatory reduplication < \*√bht?

<sup>77</sup> Miscompared in CLD VI 50, #58 with alleged reflexes of a supposed Ch. \*bVwVt- “distress, failure”.

<sup>78</sup> Affiliated by Ch. Ehret (2000 MS: 2, #1028) with Sem.: Ar. badḥ- “to communicate a secret” and LECu.: Somali badbad-i- (caus.) “to exaggerate” < AA \*bad- “to misspeak”.

<sup>79</sup> Derived in CLD VI 47 from PCh. \*bVt- “1. to fall, 2. throw” [CLD] which was graded under O.V. Stolbova’s Ch. \*bVt- (possibly, < \*HVbVt-) “to push (down), strike” and based on a comparison with WCh.: Bole-Tangale “to fall” [GT]: Kirfi bitú-wò [Schuh], Galambu báz-áalà [Schuh: -z- regular < \*-t-] – all signifying “1. to fall, 2. throw” (BT: Schuh 1978: 144), where belongs also Kupto bātū-mà “falling down due to slippery” [Leger] ||l CCh.: Buwal bat “to sink” [CLD < ?] ||l Sem. \*√hbt: Akk. abātu “to destroy, ruin”, abut “ruined, decayed” [CAD a 41] ||l Ar. √hbt “frapper, jeter en bas, précipiter en poussant” [BK II 1379] = “frapper, abattre, abaisser, avillir”, habt-at- “faiblesse d’esprit” [DRS 363 after Lane 2873].

**242.2. Sem.: Ar.**  $\sqrt{hb}t$  “jeter qqn., frapper” [BK II 1381].<sup>80</sup>

**242.3. WCh.: AS**  $\sqrt{b}wet \sim \sqrt{b}wot$  (or  $\sqrt{a_3}$ ?) “1. to release, leave, 2. place, put, 3. sow” [GT].<sup>81</sup>

**242.4. PAA**  $\sqrt{bt}$  “to push” [GT]: Ch.  $\sqrt{bVt}$ - (possibly, <  $\sqrt{HVbVt}$ -) “to push (down), to strike” [CLD VI 47-48, #52]: WCh.: AS  $\sqrt{bet} \sim \sqrt{bat}$  “to push” [GT]<sup>82</sup> =  $\sqrt{bet}$  “to push (толкать)” [Stolbova 1977; 1987] ||| SBrb.: EWlmd.  $\sqrt{b\hat{a}tb\hat{a}t}$  “conduire rapidement (pers./an.)” [PAM 2003: 18].

**242.5. PAA**  $\sqrt{bt}$  “to quit” [GT]: Sem.: Ar.  $\sqrt{bt}^c$  I “quitter qqn, s’en séparer” [BK I 82] ||| SBrb.: EWlmd.  $\sqrt{b\hat{a}ttu}$  “céder définitivement” [PAM 2003: 55: borrowed from Ar.; DRB 134, BT7: isolated in Brb.] ||| Ch.  $\sqrt{but}$ - “to untie, separate, release” [CLD VI 46, #48].

**243. NOm.: Yemsa**  $\sqrt{b\hat{u}t\hat{a}}$  “chicken” [Aklilu & Siebert in Bender 2003: 339, #13: isolated in Om.] ||| LECu.: Rendille  $\sqrt{b\hat{e}t-o}$  “Sohn, Kind” [PB apud Dlg.] | HECu.  $\sqrt{b\hat{e}lto}$  (based on Darasa) “boy” [Hudson] =  $\sqrt{b\hat{e}t}$ - (?) “boy” [GT].<sup>83</sup> Hadiya  $\sqrt{b\hat{e}t-o}$  “lad (парень)” [Dlg.] =  $\sqrt{b\hat{e}t-o}$  “figlio” [Cerulli] =  $\sqrt{b\hat{e}t-o}$  “boy” [Hudson], Kambatta  $\sqrt{b\hat{e}t-o}$  “figlio” [Cerulli] =  $\sqrt{b\hat{e}t-a}$  “boy” [Hudson], Sidamo  $\sqrt{b\hat{e}t-t-o}$  “figlio” [Cerulli] =  $\sqrt{b\hat{e}t-o}$  “son, boy” [Dlg.] =  $\sqrt{b\hat{e}t-t-o}$  “boy” [Hudson], Darasa (Gedeo)  $\sqrt{b\hat{e}lto}$  “child” [Hudson] (ECu.: Cerulli 1938 II 196; Dlg. 1973a: 73; Hudson 1989: 30) ||| Eg.: possible trace of an extinct old word  $\sqrt{bt}$  “lad”<sup>84</sup> ||| Sem.  $\sqrt{bat\hat{u}l}$ - “young man, maiden” [Gray]: hence cf. esp. OSA: Qatabanian  $\sqrt{btl}$  “Berufsstand” [GB] =  $\sqrt{btl-n}$  “clan or social group” [Rhodokanakis apud Ricks 1982: 49] (Sem.: GB 122; Gray 1934: 43; AHW 115-116; DRS 90; Leslau 1987: 112). Sem.-Eg.: SISAJa I #55.<sup>85</sup>

<sup>80</sup> Affiliated in CLD VI 51, #62 with Ch.  $\sqrt{bVt}$ - >  $\sqrt{bVt}$ - “to strike” [CLD]: WCh.: Mupun  $\sqrt{bw\hat{e}t}$  “to hit, shoot, attack” [Frj.] | Dera  $\sqrt{bw\hat{a}t\hat{a}}$  “a whip” [Newman] || ECh.: Mokilko  $\sqrt{b\hat{a}tt\hat{e}}$  “giffler” [Jng. 1990], which, in this direct way, is semantically risky. Otherwise, one would be disposed to set up a PAA  $\sqrt{b(h)}t$  “to push” [GT].

<sup>81</sup> Attested by Gerka  $\sqrt{bw\hat{e}t}$  “to put” [Ftp. 1911: 219], Angas  $\sqrt{bw\hat{o}t}$  “to release, let go, let drop” vs.  $\sqrt{bw\hat{o}t}$  “1. to lay, place, 2. spread out” [Foulkes 1915: 154-155] =  $\sqrt{bw\hat{o}t}$  “1. entlassen, gehen lassen, ausstoßen, 2. begleiten, weggeleiten, 3. legen, plazieren” [Jng. 1962 MS] =  $\sqrt{bw\hat{o}t}$  “to release” [ALC 1978: 7] =  $\sqrt{bw\hat{a}t}$  “to set” [Gochal 1994: 72], Sura  $\sqrt{bw\hat{o}t}$  “verwerfen, verstoßen (Frau), sich scheiden lassen” [Jng. 1963: 61], Mupun  $\sqrt{bw\hat{e}t}$  “to lay (one) egg, release, put, shoot, attack, hit, pour” [Frj. 1991: 8], Kofyar  $\sqrt{bw\hat{o}t}$  “to leave it, stop” [Netting 1967: 4], Mushere  $\sqrt{bw\hat{o}t}$  “1. to sow by broadcasting or scattering and spraying of acha, 2. lay egg (e.g. hen), 3. allow, leave” [Diyakal 1997 MS], Goemay  $\sqrt{bw\hat{e}t-di}$  “to put” [Ftp. 1911: 219] =  $\sqrt{bw\hat{e}t}$  “to place, put, lay” [Sirlinger 1937: 19] =  $\sqrt{b\hat{o}t}^c$  [reg. <  $\sqrt{b\hat{o}t}$ ], pl.  $\sqrt{d\hat{o}t}$  [reg. <  $\sqrt{d\hat{o}t}$ ] “setzen, stellen, legen” [Jng. 1962 MS: 7] =  $\sqrt{b\hat{e}t}$  [reg. <  $\sqrt{b\hat{e}t}$ ] (sg.) “to put on a surface, put a book on a table (lying), put a pen, put a bottle lying” [Hellwig 2000 MS: 4] (AS: Stolbova 1987: 149, #46 & 240, #2; Takacs 2004a: 42-43).

<sup>82</sup> Attested by Angas  $\sqrt{bat}$  “to push” [Ormsby 1914: 314] =  $\sqrt{b\hat{e}t} \sim \sqrt{b\hat{a}t}$  “to push, butt (of rams, etc.), any sort of shoving without piercing” [Foulkes 1915: 149] =  $\sqrt{bet}$  (sg.),  $\sqrt{ber\hat{e}p}$  (pl.) “to push” [Gochal 1994: 74], Sura  $\sqrt{b\hat{e}t}$  “niederschlagen, stoßen” [Jng. 1963: 59], Mupun  $\sqrt{b\hat{e}t}$  “to push” [Frj. 1991: 5], perhaps Mushere  $\sqrt{k\hat{a}baat}$  siki (false long -aa-? compound verb?) “to put leg for somebody so that he falls down while walking or running” (lit. “to push with leg”? cf. siki “leg”) [Diyakal 1997 MS: 138], Chip  $\sqrt{bet}$  gwe “to push” [Kraft], probably Montol  $\sqrt{ba}$  (so, no -t, error?) “to push” [Ftp. 1911: 219], Goemay  $\sqrt{bat}$  “to push aside either with hand or foot” [Sirlinger 1937: 12] (AS: Stolbova 1977: 153, #11; 1987: 240, #1; Takacs 2004a: 13-14).

<sup>83</sup> G. Hudson (l.c.) reconstructed HECu.  $\sqrt{b\hat{e}lto}$  “boy” based on Darasa (Gedeo).

<sup>84</sup> G. Takács (1999: 23; EDE II 345) assumed Eg.  $\sqrt{bt}$  “Schafhirt” (OK, Wb I 483, 6) = “Hirtentitel” (Kaplony 1969: 37) = “le berger” (V., AL 77.1337) = “(O)Eg. form of) Bata, a deity: the impregnator” (Ward 1978: 128-132) = “\*Schafhirt, \*zum Gott Bata Gehöriger” (GHWb 264) to have primarily signified “\*young man (?)”.

<sup>85</sup> The authors of SISAJa I #55 combined Sem.  $\sqrt{b\hat{u}t}$  “to separate” with Eg.  $\sqrt{bt}$  and Sem.  $\sqrt{bat\hat{u}l}$ -, which the Russian linguists explained from their PAA  $\sqrt{bat}$  “1. outside (вне, снаружи), 2. to be separated (быть отделенным), external (внешним), 3. cut off (отрезать)”. Already GB l.c. assumed a connection to Ar.  $\sqrt{btl}$

**244. NOm.: Hozo butó** “knife” [Siebert & Wedekind apud Bender 2003: 355, #51: isolated in Mao] III WCh. \* $\sqrt{\text{bd}}$  “knife” (only attested in BT and Guruntum)<sup>86</sup> [JS 1981: 157, 288].

**245. NOm.: Dizi botku** “babun” [Fleming apud Bender 2003: 213, #88] (unless < (?) Dizoid \*bark- “monkey” [GT], on which see OmAA V 679, #170) III WCh.: Tangale pidok “monkey” [Jng.] II CCh.: Guduf vithódàgl “monkey” [IL] (Ch.: JI 1994 II 236-237). This may be an extension of the biliteral AA root represented by Ch. \* $\sqrt{\text{bd}}$  (-i, -m, -k) “monkey” [JS 1981: 179A].

**246. SOM.: Aroid \* $\sqrt{\text{bT}}$**  “river” [GT]: Ari bōda [Bender & Tully], Hamer baiti [Fleming] “river” (isolated in Aroid<sup>87</sup> apud Bender 2003: 255, 350, #74) III WCh.: AS \*-but ~ \*-ḃut ~ \*-b<sup>w</sup>a<sub>2</sub>t ~ \*-ḃ<sup>w</sup>a<sub>2</sub>t (with prefixes \*či-, \*ḃu-, \*mat-) “source of water” [GT]: Angas či-bút “water oozing out of a rock” [Foulkes 1915: 158] = ši-ḃut, cf. ?ām ši-ḃut (Kabwir dialect) “water from rocks” [Jng. 1962 MS: 38], Kofyar ḃə-but “spring (natural)”, cf. also ḃu-bwāt “bog” [Netting 1967: 4] = ḃu-bwāt “bog”, cf. ḃə-but “spring (natural)” [Netting 1967: 4], Mushere ši-but kuut “hill side” (so!), ḃu-bwet ~ ḃu-ḃwet “fountain, sprinkling water from the ground” [Diyakal 1997 MS: 379], Goemay mat-ḃut “a spring, a source” [Sirlinger 1937: 136] III Brb.: cf. perhaps<sup>88</sup> NBrb.: Tamazight a-badu “1. bordure d’un champ cultivé, 2. canal d’irrigation, aqueduc”, ta-badu-tt “canal d’irrigation, aqueduc”, Timimun ā-bādu “canal d’arrosage (amenant l’eau du réservoir au cultures)”, Rif badu “talus”, Figuig badu “sillon” (NBrb.: DRB 17, BD2).

\*

## Special symbols

P: any labial stop (f, p, b, ḃ), T: unspecified dental stop (t, d, ṭ), S: any voiceless sibilant and/or affricate (s, š, ṣ̌, c, č, ĉ), Z: unspecified voiced sibilant and/or affricate (z, ʒ, ʒ̣), K: any velar stop (k, g, ʁ), Q: unspecified uvular or postvelar etc. (q, ɢ, ʁ̥, ʁ̣, h, ʕ). The vertical strokes signify the degree of closeness of the language groups (e.g. Kotoko I Masa), subbranches (e.g. North Berber II East Berber), and branches (Semitic III Egyptian), from which the individual lexical data are quoted.

“trennen, absondern”. Unacceptable in this form. But a comparison between Eg. bt and Sem. \*batūl- should not be excluded. Perhaps Eg. bt act. \* $\sqrt{\text{bt3}}$  = \* $\sqrt{\text{bt1}}$ ?

<sup>86</sup> H. Jungrathmayr & K. Shimizu (l.c., F1) assumed \* $\sqrt{\text{wd}}$  “knife” to be a PCh. variety thereof, which, if there was at all an etymological connection, could only be the opposite way around. But all this requires further research of the underlying historical phonology.

<sup>87</sup> To be separated from SOM.: Hamer baš, baz- (?) “river” [Lydall]? See in a distinct entry below.

<sup>88</sup> Unless these parallels stemmed from the root sens “border(line)”.

## Abbreviations of languages and other terms

(A): Ahmimic, AA: Afro-Asiatic (Afrasian, Semito-Hamitic), Akk.: Akkadian, Amh.: Amharic, Ar.: Arabic, Aram.: Aramaic, AS: Angas-Sura, Ass.: Assyrian, (B) Bohairic, Bab.: Babylonian, BAm.: Biblical Aramaic, Bed.: Bed'awye (Beja), Brb.: Berber (Libyo-Guanche), BT: Bole-Tangale, C: Central, CAA: Common Afro-Asiatic, Ch.: Chadic, Cpt.: Coptic, CT: Coffin Texts, Cu.: Cushitic, Dem.: Demotic, E: East, Eg.: Egyptian, ES: Ethio-Semitic, ESA: Epigraphic South Arabian, Eth.: Ethiopian, Eth.-Sem.: Ethio-Semitic, (F): Fayyumic, GR: Ptolemaic and Roman period, H: Highland (in Cushitic), Hbr.: Hebrew, Hgr.: Ahaggar, L: Late, L: Low(land), lit.: literature or literary texts, LP: Late Period, M: Middle, Mag.: magical texts, Med.: medical texts, MK: Middle Kingdom, MSA: Modern South Arabian, MT: Mubi-Toram, Mzg.: Tamazight, N: New, N: North, NAA: AA: North Afro-Asiatic (Semitic, Egyptian, Berber), NE (or NEg.): New Egyptian, NK: New Kingdom, O: Old, OK: Old Kingdom, Om.: Omotic, Omt.: Ometo, P: Proto-, PB: Post-Biblical, PT: Pyramid Texts, reg.: regular, S: South, (S): Sahidic, SAA: South AA: Afro-Asiatic (Cushitic, Omotic, Chadic), Sem.: Semitic, Sns.: Shinasha, Syr.: Syriac, Ug.: Ugaritic, W: West, Wlm(d): Tawllemmet.

## Abbreviations of author names

Abr.: Abraham, AJ: Alio & Jungrauthmayr, Akl.: Aklilu, Alm.: Alemayehu, Apl.: Appleyard, BK: Bieberstein & Kazimirski, Brt.: Barreteau, Dbr.: Djibrine, Djk.: D'jakonov, Dkl.: Diyakal, Dlg.: Dolgopolsky, Dlh.: Delheure, Drn.: Doornbos, Ebs.: Ebobisse, Fed.: Foucauld, FH: Farah & Heck, Frj.: Frajzyngier, Ftp.: Fitzpatrick, GB: Gesenius & Buhl, GT: Takács, Ibr.: Ibrizimow, IL: Institute of Linguistics, JA: Jungrauthmayr & Adams, JI: Jungrauthmayr & Ibrizimow, Jng.: Jungrauthmayr, Jns.: Johnstone, JS: Jungrauthmayr & Shimizu, KB: Koehler & Baumgartner, KM: Kießling & Mous, Kwh.: Kleinewillinghöfer, LS: Lamberti & Sottile, Mnt.: Montgolfier, NM: Newman & Ma, OS: Orel & Stolbova, PB: Plazikowsky-Brauner, PAM: Prasse, Alojaly, Mohamed, PH: Parker & Hayward, Prh.: Porhomovskij, RB: Rapp & Benzing, Rn.: Reinisch, Srl.: Sirlinger, Stl.: Stolbova, TC: Taïne-Cheikh, TG: Takács, TSL: Tourneux, Seignobos, Lafarge.

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## Semito-Hamitic or Afro-Asiatic consonantism and lexicon: Episodes of a comparative research I (Part 2: Marcel Cohen's *Essai comparatif*)\*

Gábor Takács

Department of Classical Philology, University of Łódź (UŁ)

Lexicographical Library of Afro-Asiatic Root Research at Balatonederics (LLAARR)

Member of the Associazione Internazionale di Studi sul Mediterraneo e l'Oriente, Roma (ISMEO)

gabtak@datatrans.hu | ORCID: 0000-0002-2466-6451

**Abstract:** Gábor Takács, *Semito-Hamitic or Afro-Asiatic consonantism and lexicon: Episodes of a comparative research I2 (Part 2: Marcel Cohen's Essai comparatif)*. The Poznań Society for the Advancement of Arts and Sciences, PL ISSN 0079-4740, pp. 177-209

A retrospective account on past comparative research on Afro-Asiatic (AA) or Semito-Hamitic / Hamito-Semitic (SH / HS, resp.) phonology (first of all consonantism, also root structure) and lexicon, segmented into episodes according to diverse (often overlapping in time) trends is now under way and will be presented part by part in a series of papers. The present paper contains the first ever direction of this research, labelled "Semito-Hamitology" covering studies seeking, in their conception, the "African", i.e. "Hamitic" kinship of Semitic.

**Keywords:** Afro-Asiatic, comparative linguistics, phonology, lexicon, science history.

**1.5. M. Cohen's *Essai comparatif* (1947)** can only be regarded as epochal in the sense of finally closing some century's endlessly long, mostly waste and very vague march towards realizing the common Semito-Hamitic root stock. In a way, it may even be viewed as the culmination of this trend by containing all the uncertainties, vacillation of the whole era. Although Marcel Cohen was the élève of the "classical Hamitological" era, his researches were embedded in and stimulated, on the one hand, by the "old school" of Egypto-Semitic and, on the other hand, by the fruitful "post-Meinhofian" Viennese achievements of SAA inter-branch comparison. M. Cohen's SH research turned in its more intensive phase in the academic year 1934/5 shortly after the GLECS had been established 1931.<sup>1</sup> It must have been due to the *Zeitgeist* that, as we could see above,

\* Continued from *Lingua Posnaniensis* 64/1 (2022).

<sup>1</sup> Prior to that turning point around 1930, as confessed by Cohen (1947: X), his SH comparatistic research had stayed at the minimum among his commitments: "Pour le sémitique comparé et le chamito-sémitique, je

precisely this era witnessed a sort of organized renewal of SH studies in all three enduring cradles: first of all, the first serious results in the field of comparing Egyptian (with Semitic in the background) with its African AA kindred, Berber, Beja and Hausa primarily thanks to the outstanding efforts of two pragmatical giants of SH etymology, sprung from the Viennese school: E. Zyhlarz and W. Vycichl. It was the essence of this kind of moderate approach that culminated then in the *Essai comparatif*, a milestone concluding (even if not definitely closing) the era of post-classical Semito-Hamitology. On the other hand, the foundation of both the GLECS (1931) and the first “Department of Semito-Hamitic Studies” ever on earth just in Leningrad (1933) signified the emergence of new circles of interested scholars hosting new cradles of comparative SH in both ex-imperial capitals. But why has the first SH vocabulary come to being just in Paris and not in Vienna or perhaps in Petersburg? After all, even the state-of-the-art of Semitic comparative studies had been desperate in France.<sup>2</sup> Hard to reply now. At any rate, Vienna could have certainly been a by far more logical site with its much deeper and several decades older roots in the descriptive-comparative SAA domain. Honestly speaking, personally, one would have better expected, in addition, W. Vycichl himself, in spite of being quarter of a century younger than M. Cohen, to venture such an enterprise in the light of his utterly strict comparative methodology and many-sided SH skills, beside Hebrew and Arabic, also in Berber, Bedja and Hausa, as well as his persistence in his researches during “toute une vie consacrée aux langues chamito-sémitiques” (A. Vycichl 2002b: 17). Only several other reasons had kept him far away from active research on such a project for some until the late 1940s, let alone that, soon after the war, he left Vienna forever (as so many in SH) for Paris and then Geneva.<sup>3</sup> On the other hand, how-

n’ai pu mettre au point et publier que quelques articles, communication de congrès, conférences, ainsi que des comptes rendus. En 1930, ... déchargé de l’enseignement de l’amharique et pourvu d’une chaire de comparatisme, j’ai pris diverses mesures pour poursuivre néanmoins les études chamito-sémitiques, en contact avec un public: création en 1931 du Groupe linguistique d’études chamito-sémitiques [GLECS] et instauration de cours aux Hautes Études, en dehors et à côté de mes services. ... C’est en 1934-5 que j’ai pu reprendre sérieusement l’étude du vocabulaire comparé, avec l’assistance d’un groupe d’auditeurs fidèles, aussi bien jeunes savants en cours d’étude que vétérans pourvus d’enseignements; j’ai pu alors réviser et nourrir le fichier, enfin en 1938-9 commencer le classement phonétique.”

<sup>2</sup> As described by Cohen (1947: VII): “Au cours de l’hiver 1904-1905, ... A. Meillet, dont j’étais l’élève depuis un an, m’a suggéré d’être de ses disciples qui s’occuperaient du comparatisme sémitique, négligé en France depuis la mort de Renan.”

<sup>3</sup> First of all, he was all too young in the late 1930s when, having just defended his ph.d. thesis on the comparison of Hausa and Egyptian (1932), published 2 years later (Vycichl 1934), he spent 5 seasons (1934-1938) in Luxor. When he returned to Vienna, as his wife, A. Vycichl (née Barsamian) (2002b: 15-16) is telling us in a brief biography of her husband, “il rejoint l’université de Vienne, mais la guerre va bientôt interrompre ses travaux de recherche. En 1947, il se marie avec Armène Barsamian, française d’origine arménienne. Un an plus tard, ils sont à Paris où il fréquentera assidûment la Bibliothèque nationale et commencera à faire paraître ses premiers articles”. Elsewhere, A. Vycichl (2002a: 15-16) wrote a bit more detailed on these decades: “De retour à Vienne en 1939, il poursuit ses recherches à l’Université, à l’aide de ses notes consignées dans les précieux cahiers qu’il a ramenés de Louxor. La seconde guerre mondiale va brusquement interrompre sa carrière (se profilait pour lui une chaire d’arabe à Berlin), et ses nombreux projets de recherche restent en suspens pendant six longues années. En 1947, il rencontre (chez les Mékhitaristes de Vienne) et épouse peu après, à Aspang, Armène Barsamian ... Un an plus tard, les jeunes mariés choisissent de s’installer à Paris ... Pendant la décennie parisienne (1948-1959), Werner Vycichl met à profit la Bibliothèque Nationale

ever determined the SH circle headed by N.V. Jušmanov and A.P. Riftin was, the circumstances in Soviet Leningrad, e.g., the accessibility of all the sources, did not facilitate undertaking the work for a SH root lexicon. Paris, with a wide range of SH scholars united in the GLECS, even in spite of the war, has proved to be cradle most capable for the epochal task.

In terms of quantity, its dictionary part is certainly impressive with 521 numerated (in fact, all in all, 525) entries (100 from all the 4 branches, 185 based on 3 branches, 250 on two branches). Semitic was represented in 450 entries, Egyptian in 370, Cushitic in 340, Berber in 235, Hausa in 61.<sup>4</sup> Even so, this score, regarding the matter in a purely quantitative way, remained far below the potential amount that the field research had offered by his day. The ultimate task was immense already that time. M. Cohen (1947: XI) himself declared not being able to devote more time for these studies and offered the *Essai comparatif* unfinished, offered for being continued by the future generations.<sup>5</sup> He repeatedly stressed that, being aware of the insufficient conditions, his aim was not to compose a SH etymological dictionary.<sup>6</sup> Revealing is the personal detail of his announced retirement from SH to return to his primary field of interest in Romance philology and general linguistics.<sup>7</sup> All this speaks all too obviously for failing to fulfil under those circumstances on the path his era has determined for his SH also.

Whether M. Cohen has brought about something essentially new also in terms of quality compared with the overall output of his predecessors in this domain, is hard to say in absolute terms. Certainly, its novelty lies in the re-arrangement of the old ideas, which, however, was not ripen into a synthesis in relative terms. Anyhow, the first Semitic-Hamitic comparative dictionary both in its day was and today is a true mirror and

pour ses nombreux travaux de linguistique comparée. Sa production scientifique de l'époque est riche de plus de 50 titres; il publie dans les revues les plus prestigieuses avec un régularité et une fidélité qui forcent l'admiration."

<sup>4</sup> Which was corrected by N. Pilszczikowa (1960: 99): "Dans son ouvrage Marcel Cohen a pris en considération 63 (et non pas 61) comme l'indique l'auteur) termes haoussa."

<sup>5</sup> Cohen's (1947: XI) volume "est intitulé *Essai*. Je le propose en effet comme tel, avec le regret de n'avoir pu consacrer à cette matière plus d'années, plus de connaissances et de meilleures facultés. Mais, si j'ai décidé de le rédiger et désiré le publier, c'est que j'estime qu'il peut être utile en marquant une étape de la recherche. J'espère que d'autres la continueront dans de meilleurs conditions que celles qui m'ont été imparties."

<sup>6</sup> Cohen (1947: 58): "Encore une fois, il ne s'agit nullement d'un dictionnaire étymologique du chamito-sémitique. C'est, pour un domaine encore insuffisamment défriché, l'établissement d'une très longue suite d'exemples qui peut permettre l'étude des racines et de leurs composantes phonétiques."

<sup>7</sup> Cohen (1947: XI): "En ce qui concerne le travail scientifique, mon temps disponible sera dorénavant plus consacré au français, que j'avais dû cantonner précédemment dans certaines semaines des vacances, et surtout à la linguistique générale qui m'intéresse principalement." Moved by this painful announcement, C. Brockelmann (1950: 61) *quasi* said farewell not just to an outstanding researcher of SH but in a way also to an era his in so many ways incomplete and methodologically so vague *Essai* represents: "Der Vorrede des Verf.'s muss man mit Bedauern entnehmen, dass er dies Buch als seinen letzten Beitrag zur semitischen Sprachwissenschaft ansieht. Er kündigt seine Absicht an, in Zukunft seine Kraft ganz der Romanistik zu weihen ... Man kann zwar verstehen, dass er sich damit einem dankbareren Arbeitsfeld zuwendet, muss aber auf das Lebhafteste bedauern, dass die semitische Sprachwissenschaft, die in den letzten Jahrzehnten immer mehr vernachlässigt ist und damit, wie mehrere neuere Publikationen zeigen, mit dem Stillstand zugleich dem Rückschritt vierfällt, einen ihrer erfolgreichsten Mitarbeiter verliert."

attestation of the long and etymologically mostly fruitless and misguided era of “Hamitology” as well as the half as short period of the Egypto-Semitic “old school”. Even if Cohen luckily denied the special status of Semitic as opposed to the “Hamitic” branches<sup>8</sup> and even if he was an evident adherent of the sister-family (‘equipotential branches’) model (proposed a century before him),<sup>9</sup> Cohen’s research also suffered from a certain impact of “Hamitology”, first of all, from the aversion towards Hausa and even more against its Chadic kindred in general<sup>10</sup> despite the fundamental studies of J. Lukas (in

<sup>8</sup> J.H. Greenberg (1962: 84): “The fundamental view of Marcel Cohen that Semitic has no special status as against all the others usually known as Hamitic was maintained. ... The traditional term ‘Hamito-Semitic’ is seen to have no linguistic validity.”

<sup>9</sup> What in his review on M. Cohen’s *Essai comparatif*, E. Cerulli (1951: 505) states: “Era comune accettazione sino a qualche anno fa l’esistenza di una famiglia linguistica camitica divisa almeno nei tre gruppi: egiziano, cuscitico e libico-berbero e collegata da un particolare legame di affinità col semitico. Questo legame, del resto, era più asserito che praticamente valutato o precisato; sicchè qualche scarsissima citazione del ‘camitico’, che appariva negli studi di grammatica comparata di semitico, aveva un carattere più di curiosità erudita che di dato storico. Sondaggi erano stati fatti da vari autori circa i legami che riconnettevano col semitico l’uno o l’altro dei gruppi detti ‘camitici’, ma mancava un lavoro di insieme e mancava sopra tuttora stessa prova che un ‘camitico’ esistesse come famiglia linguistica. ... entro una sola famiglia linguistica camito-semitica i quattro gruppi (semitico, egiziano, libico-berbero, cuscitico) hanno rapporti storici reciproci in quanto collegati da un unico vincolo genealogico, senza che tali rapporti siano particolarmente intensi tra i tre gruppi già isolati sotto il nome di ‘camitico’. La nuova ipotesi di lavoro: di una famiglia comprendente quattro gruppi, ognuno dei quali nella sua storia interna rappresenta stadi differenti di sviluppo ed è in combinazione di grado diverso con sostrati a loro volta differenti è ceramente feconda di risultati e darà un nuovo quadro degli stessi aspetti diacronici del semitico (come degli altre tre gruppi) ...” J.H. Greenberg (1962: 83-84) duly admitted that “Semitic was but one branch of a larger family in which the various ‘Hamitic’ languages ... constituted each a further separate branch. This view of Hamito-Semitic was first advanced in the modern period by ... Marcel Cohen in 1924. [footnote omitted] It is formulated again ... in 1947, *Essai comparatif* ... Here Egyptian, Semitic, Berber and Cushitic are treated as four coordinate branches of the same family. Hausa is occasionally brought into the comparison but its status is presented as uncertain.” As Greenberg (1962: 84) stressed, in his 1955 classification, “... each of the other suggestions of Meinhof was rejected by the presentation of evidence for their inclusion in other language families of Africa.” This view of Hamito-Semitic H.-J. Sasse (1981: 135, §2.3), listing the authors of “Die Schwesterfamilien-These” (proposed as early as Beke 1845!) as opposed to “Die hamitische These” (§2.2, pp. 132-135), mentioned a M. Cohen also to have the same idea a century later: “Die schon 1933 von M. Cohen vorgetragene These über die vier gleichberechtigten Unterfamilien des Afroasiatischen wird hier wieder aufgegriffen; in einigen Fällen wird auch das Hausa (Tschadisch) verglichen, ohne daß seine Zugehörigkeit voll akzeptiert wird”, which is why A. Zaborski (1998: 24) was not fully precise: “... c’est à Marcel Cohen que nous devons l’arbre généalogique de la famille chamito-sémitique avec ses branches ‘parallèles ...” Or, as A. Zaborski (1998: 23) stressed (in a way, certainly rightly): “l’un des résultats les plus importants de Marcel Cohen était de rejeter l’hypothèse chamite (ce que certains attribuent injustement à Joseph Greenberg ...)” One can, by the way, hardly agree with H.G. Mukarovsky’s (1981: 521) assessment that since “kein gültiger, morphologischer Gesichtspunkt eine Zusammenfassung der verglichenen Sprachgruppen zu Unterzweigen des gemeinsamen Sprachstammes erlauben,” for Cohen just as well for Greenberg a decade later, “entspreche die Bezeichnung ‘hamitisch’ eigentlich keiner bestimmten linguistischen Einheit, sondern einer groben Zusammenfassung der ‘Weißen’ Afrikas.”

<sup>10</sup> A. Zaborski (1998: 24): “Il faut reconnaître que Marcel Cohen a pris une attitude trop critique envers l’hypothèse sur l’appartenance des langues tchadiques à la famille chamito-sémitique. ... Marcel Cohen faisait autorité dans le milieu des chercheurs français à tel point qu’encore dans les années soixante-dix en France on soutenait des réserves en ce qui concerne la classification des langues tchadiques en tant que chamito-sémitiques et même dans les ‘Langues dans le monde’, les langues tchadiques ... ont apparu dans le volume consacré exclusivement aux langues de l’Afrique et non pas dans celui consacré exclusivement à la famille chamito-sémitique (David Cohen 1988).”

the 1930's) who had discovered the SH heritage in the Lake Chad languages.<sup>11</sup> As for Hausa (the biggest Chadic language), even Cohen (1947: 44-45) did not fail to advance the usual "Hamitological" argument around its ex/inclusion.<sup>12</sup> Besides, by using the label "Hamitic" (even if this was deprived of its misleading collective signification by him also), M. Cohen's authority, however strange and ironic this is, also contributed to its survival for such a long period of time in the post-Greenbergian era.<sup>13</sup> All in all, Cohen's output, as compared to his own era, can be regarded as an interim summary of the "post-classical Hamitological" root research at the best, where he too firmly maintained a few out-dated theses of the old "Hamitological" conception.<sup>14</sup>

### 1.5.1. The reaction to M. Cohen's *magnum opus* was many-sided.<sup>15</sup>

Of course, on the one hand, some scholars duly recognized it as a ground-breaking tool filling out a gap at that time. It was welcomed, e.g., by R.H. Pfeiffer (1948: 186) as "the first comprehensive work of its kind ..." E. Cerulli (1951: 506), too, celebrated it as the hallmark of a new era in general.<sup>16</sup> Regarding it in terms of quantity and not really engaged by questions of comparative methodology, W. Leslau (1949: 316) enthusiastically released just an all too optimistic appraisal of the SH state-of-the-art.<sup>17</sup> He praised even Cohen's reservation and self-criticism in general<sup>18</sup> and justified some of his weaker equations arguing with the great time depth dividing the *comparanda*.<sup>19</sup>

<sup>11</sup> Lukas 1933: Mubi, Kajakse, Masmaje; 1936a: Logone, 1937: Karbo, Sokoro, Barein, Somrai, Gabri, Nangire = Nancere, Dormo, Kaba = Kabalai, Gulei, Modgel, Masa, Kera, Fali, Higi-Baza, Wandala = Mandara, Paduko, Bana, Banana, Kulung, Lame, Muzgu, Muzgum, Kuseri, Gulfei, Shoe, Mubi; 1939a: Buduma; 1941: Musgu. Revealing is that Cohen (1947: 25) had to say but one sentence on these epochal steps ("J. Lukas a envisagé avec le haoussa les langues apparentées de la région du Tchad et il a lancé le terme du tchado-chamitique."), which did not hinder him in excluding Chadic as a whole from his comparisons – ironically – except for Hausa.

<sup>12</sup> Cohen (1947: 44-45): namely, "si on ne considère que les caractéristiques personnelles" (sic), which, in his view, was the condition it depends on that "Il s'imposait donc de ne pas exclure le haoussa d'une recherche lexicale", since "le haoussa et son groupe présentent des concordances frappantes avec le chamito-sémitique".

<sup>13</sup> P. Newman (1980: 5, fn. 6 quoted in Kaye-Daniels 1992: 431 also): it is "M. Cohen, who more than anyone else had fought against the idea of a Ham(itic) family, [who] unwittingly contributed to the survival of the concept by his use of the term 'chamito-sémitique' in his many publications in the field and in the title of his organization in Paris, Groupe linguistique des études chamito-sémitiques, founded in 1931 and still meeting."

<sup>14</sup> That was properly summed up by J.H. Greenberg (1962: 83) as follows: "Semitic is probably related to the Hamitic languages of Africa and is thus part of the Semito-Hamitic family. The membership in Hamitic (sic) is not clearly defined, but Egyptian, Berber and Cushitic must certainly be included. The various further extensions of the family by Meinhof are to be rejected or are at best highly speculative. Of these additional languages, the strongest case can be made for Hausa, but its inclusion in Hamitic (sic) cannot be regarded as proved (sic)."

<sup>15</sup> For a list of reviews cf. the belated rejoinder by N. Pilszczikowa (1960: 98, fn. 5).

<sup>16</sup> Cerulli (1951: 506): "il fatto che per merito di Marcel Cohen abbiamo per la prima volta una visione più ampia del problema camito-semitico e si apre così davvero una nuova fase per gli studi."

<sup>17</sup> Leslau (1949: 316): "... he has succeeded in a masterly way in solving many obscure problems in H-S phonology and vocabulary."

<sup>18</sup> Leslau (1949: 313): "The author preserves a critical attitude toward the whole problem, and cautiously calls his book *Essai comparatif*. He is well aware that not all of his etymologies can be accepted."

<sup>19</sup> Leslau (1949: 316): "Some of the comparisons ... might seem improbable at first sight. If we consider, however, that in Hamito-Semitic we operate with some languages documented for nearly 6000 years (Egyptian

This is in sharp contrast, on the other hand, with the rather critical lists of *addenda et corrigenda* by two other reviewers, Cantineau (1948: 177-179) and Hintze (1951: 74-87). By the way, already J. Quéméneur's (1948: 219-220) brief review stressed (quoting Cohen's own words) the fact that the *Essai comparatif* is not yet a real comparative dictionary but rather just as an attempt at drawing outlines of a comparative phonology. Only few reviews, esp. those by J. Cantineau (1948), C. Brockelmann (1950) and F. Hintze (1951) were based on thorough critical analyses of the materials and only they have bravely addressed some heavy methodological problems behind the multitude of the etymological entries, such as:

- **1.5.1.1.** An all too liberal *ad hoc* acceptance of problematic *comparanda* with diverse (sometimes even more than one each) deviant features at a time, e.g., changes like “flottements à l'intérieur des séries phonologiques”, “croisements”, “contaminations”, “racines mélangées”, “racines abrégées” that are explicitly even addressed in the theoretical introduction (Cohen 1947: 55-71).

- **1.5.1.2.** Root doublets arbitrarily assumed to be related. This free variation of root doublets is where Cohen was a forerunner to C.T. Hodge's “consonant ablaut” theory (elaborated in 1986) and H. Satzinger's *Wurzeldoubletten* (first massively put forward in 1999), both of which permitted them an unleashed, unlimited freedom of arbitrarily connecting any look-alike root at random. We all know, of course, how important rôle root variation played in Semitic and especially in Arabic lexicon, which was thoroughly examined by S.S. Majzel' and whose AA setting was established by his grandson, A.Ju. Militarev (1983). The only question is: whether one is able to observe some paradigms of the phenomenon.

- **1.5.1.3.** Several entries suffer from being overloaded by different roots stemming apparently from diverse, phonologically incomparable, etyma, forced together, where apparently a contamination, i.e., Cohen's (1947: 66-67) “croisement” is meant.<sup>20</sup>

- **1.5.1.4.** Root pattern theory: Cohen hastily projected the Semitic triliteralism back onto PAA,<sup>21</sup> without having demonstrated this on a large scale and solely arguing with an alleged domination of triliteral roots even in Egyptian, Berber and Cushitic.<sup>22</sup> He was

and some of the Semitic languages) while others (like Berber and Cushitic) are known only for the last 200-300 years, we realize the difficult task which awaits the Hamito-Semistist”. To support this, Leslau adduced a “few examples ... to show that many H-S etymologies would be more plausible if we had all the missing links in the phonetic development.”

<sup>20</sup> Cohen (1947: 66): “En ce qui concerne les racines, l'association de deux termes de compositions différentes avec la même idée eut amener le transfer dans une racine d'un élément radical d'une autre racine, soit par addition, soit par une modification inattendue qui contrarie les combinaisons phonétiques normales, soit enfin par substitution ... Il est donc fort possible que beaucoup des variantes de racines qu'on peut observer notamment en sémitique soient dues à des croisements”.

<sup>21</sup> Cohen (1947: 59): “On pouvait se demander si en reculant dans le temps au moyen de la comparaison chamito-sémitique on ne rencontrerait pas ce stade bilittère. Il n'en est rien. L'état connu par le sémitique est aussi l'état chamito-sémitique.”

<sup>22</sup> Cohen (1947: 59): “Les spécialistes ont d'ailleurs reconnu que chacun pour leur part l'égyptien, le berbère, le couchitique ont en majorité des racines trilitères ...”

only able to figure an original biliteralism in the far pre-PSH past.<sup>23</sup> He attributed biliterals in the latter two branches to consonantal erosion.<sup>24</sup> But where is a convincing mass of its etymological evidence and what about Egyptian, where the biliterals are by no means due to phoneme erosion, let alone for a significant number of triliterals that emerged via pre-/postfixes?

- **1.5.1.5.** Comparing roots purely on the ground of their homophony in spite of their semantical distance with no reasonable common ancestral meaning has been correctly rejected.

- **1.5.1.6.** *Onomatopoeia* are not excluded from the comparison, as Cohen (1947: 55-57) declared it in his chapter on the “insertion des onomatopées”.

- **1.5.1.7.** *Wanderwörter* penetrating through the leaking filters of Cohen’s files.

- **1.5.1.8.** The representation of the individual SH branches in the cognate sets by far did not exploit the lexical treasures of his day in the compared languages as M. Cohen himself also admitted:<sup>25</sup> a poorly presented Berber branch (misleading one as if it were only distantly related) as opposed to the a strong case of Egypto-Semitic to which both Cushitic would appear to lie at an equal distance, while the status of Hausa, arbitrarily extracted from its Chadic setting that had been basically recognized by J. Lukas (already in the 1930s),<sup>26</sup> was treated as a dubious case and was not even evaluated within

<sup>23</sup> Cohen (1947: 59): “Si donc un stade bilitère était à envisager, ce serait pour un état antérieur à celui que permet reconstituer à la comparaison chamito-sémitique.”

<sup>24</sup> Cohen (1947: 59): “... les bilitères berbères et couchitiques apparaissent en général comme dus à la réduction des trilitères par altération de certaines consonnes. C’est ce que confirme l’ensemble des rapprochements examinés.”

<sup>25</sup> Cohen (1947: 63): “Une grande difficulté paraît provenir du fait que le travail comparatif est insuffisamment poussé à l’intérieur des groupes.”

<sup>26</sup> J. Lukas, the first great field researcher of the Chadic languages had already (1933, 1934) isolated and distinguished the diverse language groups of the Lake Chad area, among which he found one akin to both Hausa and “Hamitic” (Lukas 1936c: 332): “... the existence of a Hamitic group in the Sudan is rather a surprise, and the inclusion of the respective languages in a special group, which seems to have resulted from a collision of a Hamitic and an older African world (the latter being perhaps to the Mandara Group of to-day) is a necessary adjustment ...”, which he surmised to be due to an admixture (Lukas 1937-1938: 181): “... um einen Ausdruck von Ernst Zyhlarz zu gebrauchen, diese Sprachen nicht als ‘genuine’ Hamitensprachen ansehen, sondern als Ergebnis einer Mischung hamitisches Sprachgutes mit älteren Sprachgütern, die nicht hamitisch gewesen sind, jedoch als solche Mischungen, deren ‘tragende’ Sprachschicht hamitisch ist.” Thence Lukas (1936c: 344-346) has isolated “the Chado-Hamitic group”, classed by Lukas (1936c: 344-345) as follows: (1) “Western Sub-group” (in the west of Bornu, east of Kano province): Bolewa, Karekare, Ngamo, Bade, Nəgzəm (= Ngizim), (2) “Middle Sub-group”: dialects of Kotoko (called Magəri by the Kanuri, today glossed as Makeri, “phonetically the most richly developed”, its phonetic system was set in a table on p. 346), Buduma (lake Chad islands dwellers), Muzgu, (3) “Eastern Sub-group”: Mubi, Kajagise (= Kajakse) and Mas-maje (Lukas: “all three peoples can understand one another”). From these “subgroups” Lukas (1936c: 347-348) has still separated the Mandara group (“languages spoken by old tribes south of Bornu”): Bura and Pabir (in and around Biu), Kilba, Margi, Chibbak, Gamargu, Bura. Lukas (1936c: 345) isolated some AA isomorphs in Chadic: “Grammatical gender is common to all these languages. ... The pronominal elements show in many respects the known Hamitic forms. In the Middle and Eastern Subgroups broken plurals occur.” Lukas (1936d: 582-587; 1937-1938) gave an even more detailed update of some common grammatical features of Chadic (as implosives, ejectives and laterals, grammatical genders, broken plural) shared with other SH branches, although neither of his papers launched into dealing with the lexical evidence except for the word for “bone” in Chadic (Hausa *kaši*) vs. Eg. *qs* (misquoted as *krś*) (Lukas 1937-1938: 292) and the numeral “4” in Chadic

SH/AA.<sup>27</sup> Cohen could not get rid of the impact of “Hamitology” fully, even if he followed the sister-branch model, which, first of all, did not change a bit about his neglect of Hausa and its Chadic kindred in general,<sup>28</sup> which is fairly awkward a whole decade having passed by that time since Lukas had observed the SH heritage around the Lake Chad and described a number of Chadic languages (in the 1930s).<sup>29</sup> When Brockelmann (1950: 61) had determined exploring general common and deviant individual traits of the AA branches perfectly rightly and correctly as “Die wichtigste Aufgabe der sem.-ham. Sprachvergleichung”,<sup>30</sup> the researchers of the individual AA branches post-Greenbergian era (following the post-Meinhofian one from the 195/60s)<sup>31</sup> had sooner or later realized it and have greatly fulfilled it. So far, it has already become clear that, e.g., the mostly favored Egypto-Semitic tandem is but a myth both in terms of basic vocabulary and morphology and the isomorphs make within the whole AA family Semitic and Berber obviously the closest-standing two branches as the hard core of NAA,<sup>32</sup> while

(Hausa fúdu, Muzgu pudu, Mubi faḍa) and Beja faḍig, Eg. fd.w (Lukas 1937-1938: 298). Ignoring Lukas’ earlier publications on this matter, even J.H. Greenberg (1962: 83) substantially postdated his discovery: “In 1938, Johannes Lukas pointed to the fact that Hausa could not be considered in isolation, but belonged to a much larger group of languages in West and Central Africa, to which he gave the name Chad-Hamitic.”

<sup>27</sup> Curiously, Cohen (1947: 25) spared his words of recognition on the significant discoveries by Lukas who “a envisagé avec le haoussa les langues apparentées de la région du Tchad et il a lancé le terme de tchado-chamitique. Tout en marquant des points de contacts septentrionaux, avec le berbère semble-t-il, il pose surtout la théorie d’une extension du couchitique vers l’Ouest ...” Due to Cohen’s decisive reluctance in accepting its supposed SH bases, Chadic had to wait another two decades to come for its wider integration in comparative AA studies thanks to J.H. Greenberg.

<sup>28</sup> A. Zaborski (1998, 24): “Il faut reconnaître que Marcel Cohen a pris une attitude trop critique envers l’hypothèse sur l’appartenance des langues tchadiques à la famille chamito-sémitique.” What is more, unfortunately, M. Cohen’s authority has prevented the admission of Chadic into the AA family even in some later French works as Zaborski (ibidem) confirms: “Marcel Cohen faisait autorité dans le milieu des chercheurs français à tel point qu’encore dans les années soixante-dix en France on soutenait des réserves en ce qui concerne la classification des langues tchadiques en tant que chamito-sémitiques et même dans les ‘Langues dans le monde’, les langues tchadiques ... ont apparu dans le volume consacré exclusivement aux langues de l’Afrique et non pas dans celui consacré exclusivement à la famille chamito-sémitique (David Cohen 1988).” Cf. Manessy (ed.) 1981 and Perrot (ed.) 1988.

<sup>29</sup> Lukas 1933: Mubi, Kajakse, Masmaje; 1936: Logone, 1937: Karbo, Sokoro, Barein, Somrai, Gabri, Nangire = Nancere, Dormo, Kaba = Kabalai, Gulei, Modgel, Masa, Kera, Fali, Higi-Baza, Wandala = Mandara, Paduko, Bana, Banana, Kulung, Lame, Muzgu, Muzgum, Kuseri, Gulfei, Shoe, Mubi; 1939: Buduma; 1941: Musgu.

<sup>30</sup> Namely, Brockelmann (1950: 61) formulated the need “festzustellen, welche gemeinsamen Züge als für den Typus dieser Sprachen charakteristisch zu gelten haben, und wie weit diese in den einzelnen Sprachen bewahrt oder umgebildet sind. Die Afrikanistik wird vor allem die Zusammenhänge des Berber. und des Kus. mit den sudanischen und nilotischen Sprachen zu untersuchen haben, die Semitistik wird den Einwirkungen des selbst erst genauer festzustellenden hurritischen Substrats im Kanaan. und Aram. nachgehen müssen. Eingehende Untersuchung verlangt noch die Frage nach dem Verhältnis der für das Semit. charakteristischen Wurzelgestalt im Vergleich mit seinen afrikanischen Verwandten. Das sie beherrschende Gesetz der drei Radikale, das die aus einer älteren Schicht erhaltenen zweindikagen Nomina und Verba mehr und mehr umgestaltet, ist im Ägyptischen noch nicht so vollständig durchgedrungen ...”

<sup>31</sup> Analyzed in a forthc. Episode VIII of this new series of papers by the present author.

<sup>32</sup> A fact that had already been surmized by Zyhlarz (1932: 72), who formulated this in the “Hamitological” phraseology of his era “Der historisch reinste (sic) Vertreter des hamitischen Sprachtypus ist Berberisch ...” Later in the 20th century, the diverse classification attempts of the AA branches according to the

the basic pharaonic lexicon can simply not be understood without Cushitic, Omotic and Chadic.<sup>33</sup>

- **1.5.1.9.** Cohen's (1947: 68-71) vision of the historical consonantism, as witnessed by his chapter on the "*État phonologique présumé du chamito-sémitique ancien*", hardly relies upon the regularities of a comparative phonology elaborated from the really reliable cognates as a whole.

- **1.5.1.10.** The method of filing the lexemes for comparison according to selected semantic items, as summed up by Cohen (1947: 46-48) in the chapter on "*Établissement d'un fichier comparatif*",<sup>34</sup> although it has only been sporadically and superficially addressed by the reviewers,<sup>35</sup> should also be dealt with below as it belongs to the very core of almost all of the problems listed above. First of all, this way of collecting data *ab ovo* substantially delimits the quantity of comparable materials and decreases the chances of finding real cognates. Why not to start a comprehensive search for all possible cognate candidates according to the initial radicals? Cohen reasoned by his aversion to „fishing” in the AA dictionaries, but why he despised this way of research as uncertain was not argued for.<sup>36</sup> Secondly, he even excluded all convincing lexical matches ahead that had already been established in other etymological works, most importantly in the GÄSW by F. von Calice, if those lied beyond the range of Cohen's a priori restricted semantical

isomorphs have commonly resulted in grouping Semitic and Berber together in a NAA block where Egyptian is a mosre loosely related satellite, cf. the most recent overview by G. Takács (2015) on these scores.

<sup>33</sup> Cf. the overwhelming outcome of a whole series of studies devoted to etymologically identifying the diverse "Layers of the Oldest Egyptian lexicon" whose part I (Egyptian anatomical terminology for part of the head) appeared in *Rocznik Orientalistyczny* (Warszawa) 68/1 (2015), 85-139; part II (parts of the head and the neck), which is forthcoming in *Rocznik Orientalistyczny* (Warszawa) 69/1 (2016), 59-124; part III (upper torso) in *Folia Orientalia* (Kraków) 53 (2016), 275-325; part VI (back parts of the body) in *Folia Orientalia* (Kraków) 55 (2018), 269-306; VIII (numerals) in *Journal of Language Relationship* (Moscow) 14/2 (2016), 119-151.

<sup>34</sup> Cohen (1947: 46-47): "Un plan a donc été constitué, comprenant les noms des objets les plus importants et des actions usuelles ... L'ensemble comprend environ 500 articles ... On a chance ainsi d'atteindre les termes fondamentaux de chaque langage, et de se tenir en général en dehors des groupes de mots empruntés. Les expressions chamito-sémitiques correspondant aux mots français de la liste ont été recherchées dans les dictionnaires, d'abord pour les langues principales, les plus riches et les mieux connues, séparément et sans procéder à aucune comparaison. Ceci en utilisant les instruments de travail les plus commodes et à portée. ... Le fichier ainsi constitué s'est ensuite norri, au long du travail d'élaboration, où tous les mots ont été confrontés afin d'examiner si de groupe à groupe ils se présentaient des ressemblances sensibles."

<sup>35</sup> Québécois (1948: 219): "Pour procéder à l'établissement de cette liste on n'est pas allé, selon l'expression de l'auteur, «à la pêche» dans les dictionnaires, mais on est parti de notions simples: objets importants, actions usuelles."

<sup>36</sup> Cohen (1947: 46): "pour éviter la « pêche » dans les dictionnaires, et les rapprochements de sens forcés ou contestables, il a paru que le seul procédé sûr était de partir des notions. En particulier ... l'opportune parution du travail de Calice, fournissant la somme des comparaisons égypto-sémitiques antérieurement proposées ... Les vues admises dans le présent travail n'ont pas toujours été les mêmes que celle de Calice, quant à la valeur des comparaisons et à leur caractère (pour les emprunts présumés); un certain nombre de rapprochements qui paraissent bons n'ont pas été repris ici, surtout lorsqu'il s'agit de notions qui ne rentrent pas dans le cadre adopté."

categories.<sup>37</sup> Therefore, plus in the light of the elaboration of the comparative phonological parts of the *Essai comparatif*, it is easy to figure how abundantly and convincingly could Cohen's files attest to regular consonantal concordances.<sup>38</sup> At this point, may we confront the scenic failure of Cohen's (1947: 70, 166-167, §E.1) semantical file catalogue system with the enigma of Eg. p vs. f and the small, although epoch-maker, study by J.H. Greenberg (1958) first exploiting the lexicon of the Angas-Sura group (West Chadic) with the same set of \*p vs. \*f where he has managed to directly identify one-to-one Eg.-AS lexical matches demonstrating this labial dichotomy as an inherited common PAA trait retained by both geographically distant sides which, by the way, a whole series of recent studies by the present author has multiply corroborated.<sup>39</sup> While Cohen, *a priori* excluding Chadic as a whole, was desperately searching the resolution of the puzzle at random in Ethio-Semitic, while Greenberg collected all possible AA sources, among others, those of AS also which had already been available by the 1940s,<sup>40</sup> thoroughly scanned them through, *inter alia* AS also, for an Egyptian problem, which ended up in finding real cognates and regular correlates just there in Chadic. I have always been astonished by the comfortable attitude of many Egypto-Semitic researchers when they are satisfied by arbitrarily searching just these two branches without scanning any other branch.<sup>41</sup> It was simply because, I am afraid, both these branches are the best known in their ancient forms in the whole AA macrofamily, which has misguided so many in this field to assume some tight cognacy or even to speak of Egyptian as a Semitic language ever since their ultimate cognacy became apparent. But what if an Egyptian puzzle can only be understood in the light of such little-exploited AA branches like Omotic or Chadic? Or, is restricting our search within AA to some preferred semantical categories warranting safe cognates as secure basis for a desired AA comparative phonology? The question is: which approach is more effective? It is not about the superiority of this or that. Not important what one does but how one does it. At any rate, I am afraid, being just a fisherman scanning through all the AA waters can bring forth more fish by far ...

A brief overview of the reviews highlighting some typical points, *ohne Anspruch auf Vollständigkeit*:

<sup>37</sup> Cohen (1947: 48): "A ce stade du travail, un secours sérieux pour l'étendue et la rapidité des recherches a été fourni par les travaux étymologiques déjà réalisés (voir ci-dessus l'Aperçu)."

<sup>38</sup> Cohen (1947: 48): "Ces fiches ont été faites en raison de la comparaison des mots en consonnes, en les répétant autant de fois qu'il y avait de consonnes, soit une à quatre fiches, généralement trois. Une première réduction a répété de même tous les exemples."

<sup>39</sup> Cf. Takács 2004b: 131-144 (AS \*b- = Eg. b-); 2006b: 121-138 (AS \*p- = Eg. p-); 2011a: 148-152 (AS \*b- = Eg. b-, AS \*p- = Eg. p-, AS \*f- = Eg. f-); 2011c: 273-289 (AS \*f-).

<sup>40</sup> Cf., e.g., the vocabulary of Angas by G. Ormsby (1912-1914) and H.D. Foulkes (1915), cf. also by F.W.H. Migeod (1911: 383-386), or that of Goemai by E. Sirlinger (1937) and that of a number of other daughter languages in the wordlists by W.F. Gowers (1907), J.F.J. Fitzpatrick (1910-1911).

<sup>41</sup> This prejudice recalls a joke: a man in the dark street saw another one near the lamppost searching something on the ground. Having been asked what he was looking for and where he lost it, he says it were his keys a couple of blocks away, which surprised the other: "Then, why are you searching just here?" The desperate person cried: "Because here is light!"

**1.5.2. J. Cantineau** (1948) was especially critical about the unleashed method of assuming  $C_3$  root extension or metathesis at will.<sup>42</sup> After having passed some comments (list of *addenda et corrigenda*, pp. 177-179) on the individual dictionary entries (accepting just a modest share thereof), he allowed himself a very critical but just comment<sup>43</sup> on Cohen's (1947: 68) table of comparative phonology and, at the same time, on the very modest output of the whole era Cohen's *Essai comparative* was only summing up and closing. This one single sentence tells everything of the epochal retardation of our state-of-affairs of the Semitic-Hamitic domain failing to cope with the neo-grammarians methodology as compared with the Indo-European. Cantineau, just like F. Hintze (below) was fully rightly upset by Cohen's (1947: 67) statement trying to legitimize the omni-comparatistic way of comparison.<sup>44</sup>

**1.5.3. E. Cerulli** (1948: 53), a frequent attendant of the GLECS circle, focused in his very brief review on the merits of the dictionary.<sup>45</sup> Not going into any details in another, just a bit longer review, Cerulli (1951: 506) celebrated Cohen 1947, in turn, as the hallmark of a new era in general.<sup>46</sup> It is a pity that no mention is found here to what extent Cohen has merely reproduced and summarized the preceding phase of the Semitic-Hamitic *Wurzelforschung* instead of better renewing it by offering something substantially new and methodologically radically different, which, I am afraid, did not take place.

<sup>42</sup> Cantineau (1948: 176): "Cette situation ne facilite pas la comparaison des vocabulaires: elle la rend au contraire plus délicate: l'existence de racines apparentées par un ou deux éléments consonantiques ou par métathèse de ses éléments, et présentant des sens voisins, multiplie énormément les possibilités de rapprochements et doit rendre le comparatiste très difficile dans leur choix. Ce qui est intéressant, ce n'est pas la **possible**, ..., mais le **probable**, autrement dit les rapprochements pour lesquels il y a plus de 50% de probabilités que les mots ou les racines envisagées remontent à un ancêtre commun. C'est seulement dans ce cas que les rapprochements peuvent être employés avec quelque sûreté pour établir des correspondances phonétiques."

<sup>43</sup> Cantineau's (1948: 180) exclamation is more revealing about the fundamental deficiencies of comparative SH linguistics than any of the detailed analyses deal with here: "Mais quel contraste avec les admirables résultats qu'a fournis la comparaison des langues indo-européennes!"

<sup>44</sup> Namely, Cohen's (1947: 67) disputable statement (*horribile visu*), that "un rigorisme trop stricte serait un obstacle illégitime (sic!) à la comparaison", on which Cantineau (1948: 176-177) reacted deservedly harshly: "... pour ma part je ne le crois pas et je pense qu'à l'inverse un laxisme trop accueillant stérilise les résultats de la comparaison. Les oppositions entre sourdes et sonores, entre emphatiques et non emphatiques ... On ne peut donc pas ... raisonner comme si cela n'était pas et comme si ... ces oppositions n'avaient pas été pertinentes. La même remarque viderait pour l'ordre des consonnes de la racine, ordre qui est pertinent dans la plupart des cas ... Mais je crois qu'il n'est pas prudent d'admettre dans chaque cas plus d'une divergence: divergence dans l'une des consonnes de la racine, divergence dans l'ordre des consonnes de la racine, légère divergence de sens. Dès qu'on admet dans un même cas plus d'une divergence, deux par exemple, un mathématicien n'aurait pas de peine à montrer que la probabilité d'un archétype commun aux deux mots ou aux deux racines considérées risque de tomber en dessous de 50%, c'est-à-dire que cet archétype devient improbable et que le rapprochement devient sans utilité pour établir des correspondances phonétiques."

<sup>45</sup> Cerulli (1948: 53): "La comparazione consente così nei suoi risultati un primo disegno della fonologia camito-semitica. Il libro è, dunque, assai più e meglio che un colpo di sonda; anzi è già una solida base dalla quale si potrà procedere per tutto un nuovo lavoro. ... E non si può non aggiungere che tanto maggiore e più degna è la benemerenza dell'Autore verso la scienza quanto più si considerano le terribili circostanze nelle quale egli viveva, quando ha cercato e trovato rifugio spirituale in queste severe ricerche."

<sup>46</sup> Cerulli (1951: 506): "il fatto che per merito di Marcel Cohen abbiamo per la prima volta una visione più ampia del problema camito-semitico e si apre così davvero una nuova fase per gli studi."

**1.5.4. R.H. Pfeiffer** (1948: 186) welcomed Cohen (1947) as “the first comprehensive work of its kind, and secondly because of the rich collection of materials, including an annotated bibliography down to 1945 (pp. 3-42), incomplete after 1939.” His main concern was the representation of the individual SH branches in the cognate sets (e.g., a poor Berber one, a strong case of Egypto-Semitic to which both Cushitic appeared at an equal distance).<sup>47</sup> Pfeiffer missed Cohen’s all too general self-criticism about the visible level of comparison in several entries.<sup>48</sup>

**1.5.5. J. Quéménéur’s** (1948: 219-220) brief review is mostly descriptive and contains not too much of a sovereign assessment and specified not much of the problems. Still, he scattered remarks stressing, very politely, some warning nuances. Thus, he directed the attention (with Cohen’s own words) to the fact that the *Essai comparatif* cannot be viewed as a comprehensive lexicon *stricto sensu* but just as an attempt at drawing some outlines of a comparative phonology,<sup>49</sup> which by far did not fully exploit the treasures in the lexical stock of the compared languages.<sup>50</sup> Quéménéur’s final word (p. 220) thus rightly stressed how much provisory and initial the phase of research is Cohen tried to summarize.<sup>51</sup> This valid demand can only be approved especially as for a substantially more intimate etymological exploration of Cushitic.

**1.5.6. W. Leslau** (1949), a regular participant the GLECS in the 1930s before leaving Europe for the States, gave us a long and pretty original list of *addenda and corrigenda* to Cohen’s entries (Leslau 1949: 314-316), albeit he was not really engaged by questions of comparative methodology. He was even praising Cohen’s reservation and self-criticism in general<sup>52</sup> and even justified or legitimized, so to say, some of Cohen’s weaker equations furnishing a theoretical argument of the great time depth.<sup>53</sup> The very polite descriptive

<sup>47</sup> Pfeiffer (1948: 186-187): “It appears from these lists that Berber has the least relations with other languages, while Egyptian and Semitic (as might be expected a priori) disclose the closest relationship. Cushitic is as close to Egyptian as to Semitic, while for Hausa, ‘la question est à réserver,’ (sic) although it seems that it is but remotely, if at all, related to the other languages. It should ... be remembered in appraising these results, that for Egyptian and Semitic we have very early documents of similar antiquity, while Berber and Hausa are modern languages, the phonemes of which have obviously evolved far from their unknown early stages.”

<sup>48</sup> Pfeiffer (1948: 187): “The author admits that much in his list is merely tentative, but apparently forgot to say so in a number of cases ...”

<sup>49</sup> Quéménéur (1948: 219): “L’essentiel du présent travail ... est une liste-lexique ordonnée dans le cadre phonologique. Si elle «ne comprend que des termes appartenant à plus d’un groupe, c’est qu’elle a un but de comparaison phonétique intérieure (sic) et n’est pas proprement un lexique étymologique».”

<sup>50</sup> Quéménéur (1948: 219): “Pour procéder à l’établissement de cette liste on n’est pas allé, selon l’expression de l’auteur, «à la pêche» dans les dictionnaires, mais on est parti de notions simples: objets importants, actions usuelles.”

<sup>51</sup> Quéménéur: “Reste en effet, à procéder encore à l’intérieur des groupes, berbère et couchitique en particulier, à un travail comparatif plus poussé qu’il ne l’a été jusqu’ici.”

<sup>52</sup> Leslau (1949: 313): “The author preserves a critical attitude toward the whole problem, and cautiously calls his book *Essai comparatif*. He is well aware that not all of his etymologies can be accepted.”

<sup>53</sup> Leslau (1949: 316): “Some of the comparisons ... might seem improbable at first sight. If we consider, however, that in Hamito-Semitic we operate with some languages documented for nearly 6000 years (Egyptian and some of the Semitic languages) while others (like Berber and Cushitic) are known only for the last 200-300 years, we realize the difficult task which awaits the Hamito-Semist”. To support this, Leslau adduced

review, skipping to discuss Cohen's multicomparatistic tendencies, ended up (p. 316) enthusiastically releasing an all too optimistic appraisal of the situation: "What is more, he has succeeded in a masterly way in solving many obscure problems in H-S phonology and vocabulary." If this were really so, why was Cohen's comparative method repeatedly targeted by other reviewers?

**1.5.7. C. Brockelmann** (1950), the leading authority of Semitic philology and comparative linguistics at that time, author a few convincing articles on SH etymology, was equally critical pointing out a number of valid methodological deficiencies. Having surveyed Cohen's HS isomorphs, Brockelmann (1950: 59) sided with Cohen's preference of comparative lexicon as the main proof of the HS cognacy.<sup>54</sup> For some reason (just by referring to Möller 1924 leaving his arguments unspecified), he too, agreed on the closeness of Egyptian and Berber but, at the same time, he stressed it not to be sensible from a lexical standpoint.<sup>55</sup> The relation of Cushitic vs. Semitic was for Brockelmann a matter of later areal contacts<sup>56</sup> just as was the common Egypto-Semitic vocabulary which he was reluctant to derive from an inherited HS parental stock.<sup>57</sup> He did not exclude with E. Littmann so strictly all *onomatopeia* from comparison (esp. in case of those very ancient ones supposed to have been derived this way still in the *Ursprache*) though, but remained rightly rather reserved against Cohen's all too liberal use of them in cognate sets.<sup>58</sup> So at once more than 30 of Cohen's entries are lost. Equally just ist Brockelmann's

a "few examples ... to show that many H-S etymologies would be more plausible if we had all the missing links in the phonetic development."

<sup>54</sup> Brockelmann (1950: 59): "Den Hauptbeweis für die Verwandtschaft dieser Sprachen findet er in den Uebereinstimmungen ihres Wortschatzes. Mit Recht betont er, dass ein wahlloser Vergleich von Wörtern aus allen vier Sprachstämmen nicht so überzeugend wirkt, wie der Nachweis, dass die verglichenen Wörter einem für die wichtigsten Bedürfnisse des Gedankenaustausches unentbehrlichen Begriffskreis angehören. Als solche bezeichnet er S. 46 die Körperteile des Menschen, Alter, Verwandtschaft und soziale Gliederung, Tiere, Pflanze, Mineralien, den Himmel, die Jahres- und Tageszeiten, die wichtigsten Handlungen und Eigenschaften des Menschen, die Lage im Raum und Ausdrücke für die Gesamtheit. Leider hat Verf. es vorgezogen, das von ihm gesammelte Vergleichsmaterial nach den Lauten zu ordnen, sodass jene Sachgruppen nicht in Erscheinung treten."

<sup>55</sup> Brockelmann (1950: 59): "Dass zwischen Aeg. und Berb. besondere historische Beziehungen bestanden haben (s. G. Möller ZDMG 73, 36 ff), darf als ausgemacht gelten, und es muss auffallen, dass diese im Wortschatz nicht stärker hervortreten."

<sup>56</sup> Brockelmann (1950: 59): "Das Verhältnis des semit. zum kusch. Wortschatz muss besonders untersucht werden; vielfach handelt es sich dabei um Entlehnungen nach beiden Seiten, die Ref. in den demnächst in den Sitzungsber. der Sächs. Akademie erscheinenden Abessinischen Studien erörtert hat."

<sup>57</sup> Brockelmann (1950: 59): "Aber auch der nur den Semiten und den Aegyptern eigene Wortschatz darf nicht ohne weiteres als Beweis für eine gemeinsame Herkunft aus einer sem.-ham. Ursprache erwertet werden, da ja zwischen den Niländern und Vorderasien viele Beziehungen bestanden, an denen das weitere Afrika nicht teilhatte." What he immediately added, though, is controversial, at least regarding his own agenda: "Mit Recht aber betont Verf., dass von seinen Vergleichen solche Wörter nicht ausgeschlossen werden dürfen, die nur in einer einzigen semitischen Sprache belegt sind, da solche sehr wohl dem Wortschatz der Grundsprache angehört haben können."

<sup>58</sup> Brockelmann (1950: 59): "In seine Liste hat C(ohen). auch die sogen. Onomatopoetika aufgenommen (S. 55), die er sonst treffender mots expressifs nennt, während E. Littmann diese von der Vergleichung ausschliessen wollte. Es ist zuzugeben, dass nicht alle Versuche, Schallempfindungen in Sprachlauten wiederzugeben, zu allen Zeiten als solche aufgefasst sind, dass für manche verba namentlich, bei deren Schöpfung

(1950: 60) criticism about the *Wanderwörter* penetrating through the leaking filters of Cohen,<sup>59</sup> whereas his phonologically all too subjective and vague etymologies resulted in discarding some 73 further entries in this review.<sup>60</sup> One disturbing reason is how generous Cohen was handling alleged homorganic root varieties (doublets) in Semitic where Brockelmann would have better stuck to S. Fraenkel's strict position demanding explicit arguments for such cases (of which Brockelmann listed quite a lot here) to avoid a chaotic multicomparativism.<sup>61</sup> The review correctly rejected other cases because of comparing Egypto-Semitic roots purely on the ground of homophony in spite of their semantical distance with no reasonable common ancestral meaning.<sup>62</sup> Having sorted out a great deal of items on these grounds, Brockelmann ended up regarding but just 188 items as sure ones he would retain of Cohen's total of more than 500 examples.<sup>63</sup> This solid share of the common HS lexicon with all its so reminded the reviewer of a "primitive" society,<sup>64</sup> which appears to contradict to the fact that Brockelmann, at the same time, admitted here a number of terms presupposing a neolithic culture.<sup>65</sup> Perhaps the biggest achievement of the *Essai comparatif* was how it convinced, irrespective of all its blunders, even such a sceptical authority as Brockelmann about the kinship of the four branches<sup>66</sup> even if he kept maintaining to assume here some other model than an ultimate genetic one.<sup>67</sup> The review's valid and objective statements make Cohen's (1947) fundamental

die Sprachgemeinschaft Klangwirkungen zu erzielen suchte, diese den Nachfahren nicht mehr zum Bewusstsein kamen. Andererseits ist nicht zu verkennen, dass Schalleindrücke in sonst nicht verwandten, aber typologisch einander nahestehenden Sprachen ähnliche Formen hervorrufen, wie sem. *gurāb*, altn. *hrafn*, *corvus*, *kópaž* usw. gegenüber türk. *qaq*. Daher empfiehlt es sich doch von solchen Wörtern abzusehn, wenn man den gemeinsamen Wortschatz einer grösseren Sprachgemeinschaft festzustellen wünscht."

<sup>59</sup> Brockelmann (1950: 60): "Mit Recht schliesst C(ohen). alle nachweisbaren Entlehnungen von seiner Liste aus. Doch auf diesem Gebiet ist das Urteil nicht immer mit Sicherheit zu fällen; es scheint daher geraten, auch noch eine Anzahl von Wanderwörtern, die er in seine Liste aufgenommen hat."

<sup>60</sup> Brockelmann (1950: 60): "ein subjektives Urteil über die Möglichkeit ungewöhnlicher Lautvorgänge auszuschalten. Bei einer Reihe von Vergleichen hat Verf. schon selbst Zweifel an ihrer Richtigkeit geäussert. Ref. kann aber auch seine Bedenken gegen die Zulässigkeit anderer, von C. angenommener Etymologien nicht unterdrücken und muss daher nicht weniger als 73 seiner Zeugen für eine sem.-ham. Verwandtschaft ablehnen."

<sup>61</sup> Brockelmann (1950: 60): "Die Labilität der sem. Wurzeln ist allgemein bekannt, da sie durch Analogiebildung und sekundäre Angleichung vielfach umgestaltet werden. ... Aber schon S. Fraenkel hat BASS III, 60 ff. gegen J. Barth mit Recht betont, dass alle solche Annahmen irgendwie begründet sein müssen, um nicht der Willkür Tor und Tür zu öffnen."

<sup>62</sup> Brockelmann (1950: 60): "Öfter wird man auch ähnlich klingende Wörter wegen gänzlich verschiedener Bedeutung ablehnen müssen."

<sup>63</sup> Brockelmann (1950: 60): "Nach Abzug der zweifelhaften und der nur einen Teil des zur Untersuchung stehenden Gebietes deckenden Etymologien bleiben 188 Nummern übrig, die mit mehr oder weniger Sicherheit auf reine sem.-ham. Grundlage zurückweisen."

<sup>64</sup> Brockelmann (1950: 61): "Es ist also ziemlich der gesamte Umfang des Interesses und der Betätigung einer primitiven Gesellschaft in einem gemeinsamen sem.-ham. Wortschatz vertreten."

<sup>65</sup> Brockelmann (1950: 61): "Unter den Tieren stehn 6 Namen für Haustiere (43, 181, 189, 200, 279, 517) ... Für Pflanzen und ihre Teile finden sich 5 Namen ... neben den für Weizen (122) und Gerste (280) ..."

<sup>66</sup> Brockelmann (1950: 61): "Man wird daher den öfter auch vom Ref. geäusserten Zweifel an einem sem.-ham. Grundstock aufgeben müssen."

<sup>67</sup> Brockelmann (1950: 61): "Doch muss das Verhältnis zwischen den beiden Hauptgruppen (sic) und den vier historisch bezeugten Sprachstämmen anders gefasst werden als das einer direkten genealogischen Ver-

failure clear as one badly misses here at least an elementary elaboration of some principal rules of comparative phonology within the individual branches in the first step.<sup>68</sup> When Brockelmann (1950: 61) determined “Die wichtigste Aufgabe der sem. -ham. Sprachvergleichen” in exploring general common and deviant traits of the branches,<sup>69</sup> the Greenbergian era (Episode VIII in the present series of paper) has greatly fulfilled it. Still, this demand (extending to syntax etc.) is far misplaced in the review of a comparative lexicon which can first of all made responsible for failing in carefully adapting onto SH the comparative methods of the Neo-Grammarians elaborated in Indo-European and Uralic by that time.

**1.5.8. M. Rodinson** (1950), in spite of a fundamental enthusiasm,<sup>70</sup> criticized Cohen, all too carefully and in a forgiving manner though, for missing the required rigor in his comparative method but even doing so, he remained tolerant as for the so many dubious equations as suggestions worth being re-examined by later research.<sup>71</sup>

wandtschaft. “It is with surprise that one reads right here Brockelmann’s formulation “zwischen den beiden Hauptgruppen” – a great step backwards right for him! – instead of sg. like “among the 4 branches” knowing how firmly and rightly he stood for the sister-branches model and against the misleading traditional dichotomy of Semitic branch vs. an ill-founded “Hamitic” unity. As for the new model of HS relations, Brockelmann (1950: 61) mentions that “A. Meillet hat BSL 1935, 4/6 mit Recht darauf hingewiesen, dass Sprachverwandtschaft nicht überall gleich zu bewerten ist. Die Sprachen sind ja nicht biologische Einheiten, die sich nach genetischen Tendenzen weiter entwickeln, sondern Erscheinungsformen des Gesellschaftslebens, die im Lauf der Geschichte durch Wanderung und Verkehr der Stämme unter einander übernommen und ausgetauscht werden. ... Ähnliche Zustände sind im Leben der Afrikasprachen zu beobachten. Daher ist es um so höher zu bewerten, wenn man zwischen Semiten, Aegyptern, Berbern und Kuschiten, obwohl sie seit Jahrtausenden ohne jede direkte Gemeinschaft gelebt haben und erst in späteren Zeiten wieder in längere Berührung mit einander getreten sind, noch Spuren ehemaliger Zusammengehörigkeit aufweisen kann, die zwar nicht notwendig auf die Abstammung von reinem gemeinsamen Urvolk, wohl aber auf eine frühere engere Berührung ihrer Lebenskreise hinweisen.”

<sup>68</sup> Although, as Brockelmann (1950: 61) also stressed, “Cohens Interesse gilt in erster Linie dem Nachweis eines gemeinsamen Lautstandes der von ihm untersuchten Sprachen”. Therefore, one can agree with Brockelmann (1950: 61) that “Es hätte sich vielleicht empfohlen, die phonologischen Systeme der einzelnen Sprachen doch einmal im Zusammenhang mit einander zu vergleichen. Dabei wäre u.a. die Tatsache, dass das Berber. keine Laryngalen mehr besitzt, stärker hervorgetreten; unter seinem Einfluss hat auch das Punische diese Lautgruppe eingebüsst ...”

<sup>69</sup> Namely, Brockelmann (1950: 61) formulated the need “festzustellen, welche gemeinsamen Züge als für den Typus dieser Sprachen charakteristisch zu gelten haben, und wie weit diese in den einzelnen Sprachen bewahrt oder umgebildet sind. Die Afrikanistik wird vor allem die Zusammenhänge des Berber. und des Kus. mit den sudanischen und nilotischen Sprachen zu untersuchen haben, die Semitistik wird den Einwirkungen des selbst erst genauer festzustellenden hurritischen Substrats im Kanaan. und Aram. nachgehen müssen. Eingehende Untersuchung verlangt noch die Frage nach dem Verhältnis der für das Semit. charakteristischen Wurzelgestalt im Vergleich mit seinen afrikanischen Verwandten. Das sie beherrschende Gesetz der drei Radikale, das die aus einer älteren Schicht erhaltenen zweiradikalen Nomina und Verba mehr und mehr umgestaltet, ist im Aegyptischen noch nicht so vollständig durchgedrungen ...”

<sup>70</sup> Rodinson (1950: 151): “C’est bien une œuvre de comparatiste prenant pour modèle la grammaire comparée indo-européenne, monument bien fait pour susciter à la fois l’admiration et l’émulation”.

<sup>71</sup> Rodinson (1950: 158): “Cependant, on reprochera peut-être à Marcel Cohen d’avoir cité un certain nombre de faits peu probants. Il y a tout avantage à se montrer très strict aux yeux de l’opinion publique des linguistes. Mais **une trop grande rigueur peut parfois aller au détriment des véritables intérêts de la science** (sic!) quand elle détourne d’avancer des probabilités et des plausibilités. Si elles-ci sont bien indiquées

**1.5.9. I.J. Gelb** (1951: 61) managed to add almost nothing to our discussion but common places about Cohen's dictionary praising its "very useful bibliography and history of the relationships of the Semitic and (sic) Hamitic languages".

**1.5.10. F. Hintze** (1951: 65-87) published the most detailed and abundant evaluation I know of, which thoroughly examined the individual etymological entries of Cohen's comparative dictionary (Hintze 1951: 74-87), introduced by a justly critical appraisal of the predominantly *ad hoc* and all too arbitrary comparative methodology in Cohen's lexicon (Hintze 1951: 68-73)<sup>72</sup> and, at the same time, also in the works almost by the whole "old school" of Egypto-Semitic comparison (see Episode II of this series of papers), namely: (1) free use of look-alikes without applying the necessary neo-grammarian rigor,<sup>73</sup> where (2) he only arbitrarily assumed *ad hoc* changes;<sup>74</sup> (3) free variation of root doublets.<sup>75</sup> Hintze (1951: 69) rightly refuted Cohen's explicit self-justification on these matters.<sup>76</sup> Regarding our state-of-the-art even 75 years after the *Essai comparatif*, Hintze's (1951 70-71) cautious and warning thoughts are still to be long remembered, I am afraid, as a comprehensive AA historical phonology in all its aspects has until now not been

comme telles, elles ne peuvent induire personne en erreur. Elles peuvent, le cas échéant, être plus tard vérifiées, contrôlées, confirmées ou infirmées, par de nouvelles recherches ..."

<sup>72</sup> Which W. Vycichl (1957, 38) conceived otherwise: "M. Cohen's *Essai comparatif* ... (1947) was severely criticized by F. Hintze (1951)."

<sup>73</sup> Hintze (1951: 69): "Manchmal genügt C(ohen). Schon ein bloßer Anklang der Wörter bei gleicher Bedeutung ..."

<sup>74</sup> Like "flottements à l'intérieur des séries phonologiques", "croisements", "contaminations", "racines mélangées", "racines abrégées" (Cohen 1947, *passim*). A justification was established by Cohen (1947, 66) as follows: "En ce qui concerne les racines, l'association de deux termes de compositions différentes avec la même idée peut amener le transfert dans une des deux racines d'un élément radical d'une autre racine, soit par addition, soit par une modification inattendue qui contrarie les combinaisons phonétiques normales, soit enfin par substitution."

<sup>75</sup> Hintze (1951: 69): "Nun nimmt C(ohen). aber ausdrücklich eine Reihe von phonetischen Veränderungen der Wortgestalt zu Hilfe, die zwar je für sich möglich sind, die jedoch bei gehäufte Anwendung schließlich **jede** Vergleichung ermöglichen. So rechnet C(ohen). etwa mit 'flottements à l'intérieur des séries phonologiques' (67), mit 'croisements', 'contaminations', 'racines mélangées' (66) und 'racines abrégées'". In this respect, he was a forerunner to C.T. Hodge's "consonant ablaut" theory (elaborated in 1986) and H. Satzinger's *Wurzel-dubletten* (first massively put forward in 1999), both of which permit them an unleashed, unlimited freedom of arbitrarily connecting any look-alike root at random. Thus, Hintze's (1951: 69) warning is still painfully actual even seven decades later: "... es liegt nämlich die Versuchung nahe, auch bei bloßer lautlicher Ähnlichkeit der Entsprechungen in den einzelnen Sprachen etymologische Zusammengehörigkeit anzunehmen; dies umso mehr, wenn man in der Ansetzung der Lautentsprechungen und der einzelsprachigen Entwicklung der 'Wurzeln' einigermaßen großzügig ist. Manchmal genügt C(ohen). schon ein bloßer Anklang der Wörter bei gleicher Bedeutung ..."

<sup>76</sup> Cohen (1947, 69): "En ce qui concerne les racines, l'association de deux termes de compositions différentes avec la même idée eut amener le transfer dans une racine d'un élément radical d'une autre racine, soit par addition, soit par une modification inattendue qui contrarie les combinaisons phonétiques normales, soit enfin par substitution ... Il est donc fort possible que beaucoup des variantes de racines qu'on peut observer notamment en sémitique soient dues à des croisements".

elaborated as yet.<sup>77</sup> These exact words by Hintze as well as his overall negative conclusion<sup>78</sup> fit in well in general also to be regarded a sort of farewell of a turbulent and confused era of “Hamitological” comparative studies, whose characteristic expression and culmination we can indeed see in the *Essai comparatif*, although he had doubts even about this ranking holding F. von Calice’s (1936) more precise and minimalistic GÄSW complemented by J. Vergote’s (1945) equally epochal *Phonétique historique* in higher esteem.<sup>79</sup> Hintze’s sharp-minded determination of the most urgent tasks in this domain, such as consonantal and lexical reconstruction of the neglected SAA sub-levels (branches, groups)<sup>80</sup> has only partially and all too modestly been fulfilled in the past 7 decades, so these precisely cover even our recent agenda esp. in Southern Cushitic, the poorly charted Omotic and Chadic groups.

But the firm fact, that the enterprise of *Essai comparatif* had *ab ovo* been doomed to failure, is fundamentally by far not the guilt of M. Cohen alone but was due to the very poor state-of-the-art of his own “Semitic-Hamitological” era substantially retarded far behind the Indo-European domain in the preceding experimental century described in Part 1. What is even more painful, every single AA dictionary of the recent decades (SISAJa, HCVA, HSED, Ehret 1995) had to equally fail, I am afraid. The job of reconstructing

<sup>77</sup> Hintze (1951: 70-71): “Aus diesen vielfältigen Möglichkeiten für die Veränderungen der Wurzeln zieht C(ohen). den Schluß: ‘Dans ces conditions, **un rigorisme trop stricte serait un obstacle illégitime** (sic!) à la comparaison’ (67). **Hier scheint mir nun unbedingt das Gegenteil richtig zu sein:** gerade wenn C(ohen). recht hat mit der Annahme einer so großen ‘Labilität’ der hamitosemitischen Wurzel und so vielfältiger phonetischer Entwicklungen, die insbesondere auch wegen des oft erheblichen zeitlichen Abstandes der einzelnen Formen weitgehende Veränderungen bis zur völligen Unkenntlichkeit möglich erscheinen lassen, so muß bei allen Vergleichen um so mehr mit ganz besonderer Vorsicht vorgegangen werden, denn sonst schwindet jeder sichere Boden unter den Füßen. **Es gilt zunächst einmal, die normalen Lautentsprechungen der hamitosemitischen Sprachen festzustellen;** dazu können aber nur sichere oder wenigstens möglichst zweifelsfreie Gleichungen als Grundlage dienen. **Hier nützen zehn sichere Gleichungen mehr und geben ein klareres Bild als hundert unsichere,** fragliche oder nur unter vielen Einschränkungen mögliche. **Alle Abweichungen von den als zweifelsfrei angenommenen Entsprechungen bedürfen einer Erklärung durch Feststellung der jeweiligen besonderen Bedingungen und Voraussetzungen.** Jeder dieser nur möglichen oder fraglichen Fälle erfordert eine eingehende Untersuchung, **eine genaue und sorgfältige Diskussion** der für die Abweichungen verantwortlich zu machenden Ursachen. ... So ist es denn auch nicht bewunderlich, daß die Bemerkungen, die C(ohen). zur hamitosemitischen Lautlehre macht, recht allgemein und farblos bleiben. Irgendwelche Tabellen der Lautentsprechungen werden nicht gegeben — dies wäre in der Tat nach dem von C(ohen). zusammengestellten Material kaum möglich.”

<sup>78</sup> Hintze (1951: 87): “Zusammenfassend läßt sich sagen, daß das Werk von Marcel Cohen für die vergleichende Hamitosemitistik wohl keinen sehr großen Fortschritt bedeutet.”

<sup>79</sup> Comparing the virtues of the three tools, Hintze (1951: 87) states: “Jedenfalls ist das Werk Franz Calices dadurch in keiner Weise überholt, denn dieses ist durch die besonnenere Art der Darstellung und die kritische Sichtung des Stoffes (und auch durch die jeweiligen Literaturangaben) ein wirklich brauchbares und – trotz einzelner Irrtümer – recht verlässliches Handbuch, dessen Wert jetzt durch die phonetische Aufgliederung seines Inhalts durch J. Vergote [footnote omitted] wesentlich erhöht wurde.”

<sup>80</sup> Hintze (1951: 87): “Die wichtigste Aufgabe der vergleichende Hamitosemitistik dürfte für die nächste Zukunft aber doch weniger die umfassende Wortvergleiche sein, ..., als vielmehr die genaue und exakte Durcharbeitung der einzelnen Gruppen und Untergruppen des Hamitosemitischen: es fehlt zurzeit noch an berberischem, kuschitischem, ja semitischem vergleichenden Wörterbüchern, Grammatiken und Lautlehren. Ehe die notwendigen Vorarbeiten hier nicht weiter gediehen sind, wird sich ein wirklicher Fortschritt auf diesem Gebiet kaum erreichen lassen.”

all possible SAA diachronic layers and groups for an ultimate comparison was and is still now enormous (if not right impossible) and things will certainly stay as they are until the research strategy substantially changes in our literally endangered small comparative domain instead of global AA etymologies in favour of a careful step-by-step reconstruction of every single SAA group and only then the proto-phonologies and -lexicons of the three SAA branches, which is a *sine qua non* of PAA. Anyhow, the first Semito-Hamitic comparative dictionary both in its day was and also today is a true mirror and attestation of the long and etymologically mostly fruitless era of “Semito-Hamitology”. Painfully, the publication of all of the existing AA lexicons was by far premature and ill-founded to various degrees in each case, but the scholarly dispute over their blunders and imperfections, after all, has greatly inspired and enriched our domain.

But all this criticism was, as a matter of fact, just what prepared a fertile soil for definitely reckoning with the rest of the anachronistic “Hamitological” deficiencies Cohen could not overcome. In fact, the *Essai comparatif* plus the profound critical analyses from the 1950s altogether mark the end of a century-long era. Without the needed comparative infrastructure and a diachronically neatly cultivated SAA material, the task of M. Cohen within that couple of decades of his own research could *eo ipso* only be and was thus even in the best case supposed to be just re-arranging the obscure wild jungle of a desperately neglected domain that had clearly been more than a century retarded behind the state-of-the-art of IE in his day. The *Essai comparatif* can thus only be regarded as epochal in the sense of finally closing some century’s endlessly slow, mostly waste, disoriented and very vague march towards realizing the common Semito-Hamitic root stock. In a way, it may even be viewed as the culmination of the only known and usable AA comparative trend of its day by containing all the uncertainties, vacillation of the whole era. The vast materials accumulated by M. Cohen served in the subsequent decades as a starting point for a re-thought strategy. He prepared in the jungle a plot of fertile soil for definitely reckoning with the rest of the anachronistic “Hamitological” deficiencies that Cohen alone could not have overcome anyway. Thus it could be exploited for a later (re)starting point of the Greenbergian and Diakonovian approaches with more carefully selected materials and revised comparative methods.

**1.5.11. The after-life of Cohen’s *Essai comparatif*** in the mirror of its more recent appraisal by a number of authors even a half of century later may well signify the importance of this first reference tool of its kind, but may also be due to the unhappy lack of any new AA comparative dictionary thereafter for some three or four decades to come. The significant divergence as to its assessment in the following decades is revealing about the distinct trends in our greatly atomized field of research where a *communis opinio* was hardly attained in any of the principal issues.

**1.5.12. N. Pilszczikowa** (1960), puzzled about which way to follow in evaluating Cohen’s comparative method,<sup>81</sup> was satisfied by sharing the position of M. Rodinson

<sup>81</sup> Pilszczikowa (1960: 99): “Marcel Cohen lui-même a maintes fois souligné ces difficultés, et les savants qui ont rendu compte de son Essai en ont fait autant. Fallait-il adopter le point de vue de J. Cantineau [foot-note omitted] que dans des comparaisons de ce genre il ne peut y avoir plus d’une divergence sur les trois possibles: ‘divergence dans l’une des consonnes de la racine, ... dans l’ordre des consonnes de la racine et ‘divergence des sens’ ou suivre Marcel Cohen qui retenait des comparaisons avec plus d’une divergence et

(1950) and at that point abandoned dealing with these “difficulties”, which is why her paper is not to be regarded as a review *stricto sensu*, and she focused better on furnishing further Chadic materials: in the first part of her “review”, she complemented Cohen’s entries with new Hausa comparanda (pp. 104-125), while the second part (pp. 125-130) offered *addenda* from some other West Chadic languages also.

**1.5.13. C. Gouffé** (1969-1970) offered for the GLECS session of the 17 Dec. 1969 an impressive quantity of Hausa lexical contribution to the entries of M. Cohen’s dictionary on the occasion of its reprint<sup>82</sup> which overlapped with the first SH Congress.<sup>83</sup> Duly admitting how reluctant Cohen was about including Hausa in his research,<sup>84</sup> Gouffé carefully skipped theoretically re-examining this very problem itself.<sup>85</sup> Then, he took due, albeit mechanical notice of the progress of Chadic comparative linguistics without hardly any comments (Gouffé 1969-1970: 28): J.H. Greenberg’s (1955: 1963) inclusion of Hausa in Chadic and in SH/AA as well as a long description of N. Pilszczikowa’s (1960) article, where only remarked some of her Hausa comparanda as being all too risky,<sup>86</sup> whereas beside the first attempt at a comprehensive phonological reconstruction of Proto-Chadic by P. Newman and R. Ma (1966) whose ignorance about Cohen 1947 he considered unjust,<sup>87</sup> he left a parallel enterprise for the Proto-Chadic initial labials by V.M. Illič-Svityč (1966) without a mention. Gouffé (*op.cit.*, pp. 29-30) then lengthily described the new Hausa-Egyptian establishment by C.T. Hodge (1966) and finally his own paper (presented at the Paris SH Congress in 1969) on Hausa-Twareg matches be these cognates or be these loans.<sup>88</sup> But the reviewer’s new Hausa parallels are meant to be inherited.

auquels certains critiques ont reproché d’être trop libéral dans le choix de ses exemples? ... Mais sur ce point je crois juste l’avis de Maxime Rodinson: ‘... On reprochera peut-être à Marcel Cohen d’avoir cité un certain nombre de faits peu probants. ... Mais une trop grande rigueur peut parfois aller au détriment des véritables intérêts de la science (sic!) quand elle détourne d’avancer des probabilités et des plausibilités.’ ...”

<sup>82</sup> Esteemed by Gouffé (1969-1970: 27) as a “réimpression si longtemps attendue”.

<sup>83</sup> Gouffé (1969-1970: 27): the reprint “a coïncidé, de la façon la plus opportune, avec la tenue à Paris, en juillet dernier (i.e., 1969), du Congrès International de Linguistique ... Chamito-Sémitique.”

<sup>84</sup> Gouffé (1969-1970: 27): M. Cohen “se montre très réservé sur le point de savoir si le haoussa devait être inclus de plein droit dans l’ensemble chamito-sémitique; d’autre part, divers arguments ... lui interdisaient d’exclure les données haoussa à sa disposition lexicale présentées dans le corps de l’ouvrage”.

<sup>85</sup> Gouffé (1969-1970: 27) did not intend “de reprendre la discussion de ce problème, mais seulement de verser quelques faits nouveaux au dossier, sous la forme de rapprochements complémentaires concernant le haoussa”.

<sup>86</sup> Gouffé (1969-1970: 29): “Mon propos n’étant pas de me livrer ici à un examen critique de cette étude, je dirai simplement que, s’il est incontestable qu’elle apporte parfois d’utiles compléments à l’Essai comparatif, elle avance aussi un certain nombre de rapprochements hasardeux, dont il convient de laisser la responsabilité à l’auteur.”

<sup>87</sup> Gouffé (1969-1970: 29): “On peut se montrer surpris que nulle part – et pas même dans l’assez copieuse bibliographie termine l’article – la moindre allusion ne soit faite au livre de M. Marcel Cohen. Sans doute les auteurs ont-ils tenu à se limiter, en toute rigueur, aux seules données intra-tchadiennes, que M. Marcel Cohen n’envisageait effectivement pas en 1947.”

<sup>88</sup> Gouffé (1969-1970: 30): “... une liste de 131 rapprochements, dont le mot «contacts», choisi à dessein pour le titre de ce premier sondage, indique suffisamment qu’il peut s’agir, dans certains cas, aussi bien

**1.5.14. G.W. Tsereteli** (1970: 271) took M. Cohen's (1947) comparative dictionary and its conception on the classification (pretty out-dated almost quarter of a century later!)<sup>89</sup> as practically the only (!) basis of his misguided investigation as to the nature of kinship between Semitic and the African branches of AA,<sup>90</sup> although he in fact examined only certain Cushitic groups where he expected to find in the *Essai comparatif* regular matches. He then demonstrated this assumption by the example of how one only fails to see the shared origins of the Semito-Cushitic numerals.<sup>91</sup> It is a pity that he failed to offer first a comprehensive survey of the Cushitic numeral systems (done later by others).<sup>92</sup> Thence he was disposed to hastily conclude that there is no cognacy between Semitic and Cushitic at all.<sup>93</sup> It was misleading how he generalized the case of Ma'a (Mbugu, a mixed language with a Bantu grammar but substantially Cushitic/AA lexicon) for "many" other Cushitic languages whose evidence he did not present either.<sup>94</sup> Fortunately, he himself had some doubts about such a daring distinction of Semitic vs.

d'emprunts plus ou moins anciens de l'une à l'autre langue que de termes issus d'une même base chamito-sémitique commune."

<sup>89</sup> E.g., Tsereteli (1970: 280) maintains in his summary that, in spite of the classification of 4 independent branches + Hausa "recognized as generally accepted" (thus, ignoring the new Greenbergian classification, which was at that time indeed generally used, now extended by the Omotic branch), "Special investigations carried out by M. Cohen showed however that regular correspondences established for Semitic and the so-called Hamitic languages are so meagre that there are hardly any grounds for taking of relationship in the usual sense of the word." One wonders if he had worked with the Cushitic or Chadic comparative materials of J.H. Greenberg (1955 or 1963) by the time of writing his study, since he rushed to decide the question otherwise: see appendix. Tsereteli (1970: 280): "On the other hand it is impossible not to admit there exist definite spheres of correspondences both in vocabulary and also, what is more important, in the phonological and morphological systems. The phenomenon is explained ... in the light of the allogetic theory, according to which in such cases we have bilateral genetic relations with different language families."

<sup>90</sup> Tsereteli (1970: 272-273): "... eingehende Untersuchungen von M. Cohen [footnote omitted] selbst und anderen Forschern zeigten, wie unbedeutend die regelmäßigen Übereinstimmungen zwischen den semitischen und anderen Sprachen dieser Gruppe sind, so daß kein Grund besteht, hier von irgendeiner Verwandtschaft in gewöhnlichem Sinne zu sprechen."

<sup>91</sup> Tsereteli (1970: 272): "So kann z.B. kaum eine gemeinsame Herkunft vorausgesetzt werden bei Zahlwörtern für sem. '3' ... und bedaye ..., sem. '5' ... und bed. ...; sem. '8' ... und bed. ... In der Bedaye-sprache, wie auch in einigen anderen kuschitischen Sprachen, beruht die Bildung der Zahlwörter nach 'fünf' auf folgendem Modell: 'fünf' + 'eins' = 6, 'fünf' + 'zwei' = 7, 'fünf' + 'drei' = 8, in einigen Sprachen sogar 'eins' + 'Hand' = 6, 'zwei' + 'Hand' = 7, usw. [footnote omitted] Ein derartiges Modell für die Bildung von Zahlwörtern ist den semitischen Sprachen fremd. Außerdem haben die Zahlwörter einiger kuschitischer Sprachen hinsichtlich des Sprachguts selbst in genetischer Hinsicht nichts gemeinsam mit den semitischen Zahlwörtern. Dasselbe trifft sogar für solche kuschitischen Sprachen wie das Bedaye zu, die zu den sogenannten 'Orthodox' [footnote omitted] Cushitic gehören, d.h. die in der Konjugation ... und hinsichtlich der Pronomina eine sichtbare Ähnlichkeit mit den semitischen Sprachen aufweisen ..."

<sup>92</sup> Which were later studied by A. Zaborski (1987) and V. Blažek (1999).

<sup>93</sup> Tsereteli (1970: 273): "Vieler der kuschitischen Sprachen haben aber nichts gemeinsam mit den semitischen außer einzelnen Elementen dessen, was A.N. Tucker Block pattern bzw. Interlocking pattern nennt."

<sup>94</sup> Tsereteli (1970: 273): "So ist z.B. die Konjugation in der Ma'a Sprache (Mbugu) typisch für die Bantu-Sprachen. ... Es gibt vieler solche Fälle in den sogenannten 'Fringe Cushitic Languages' (nach der Terminologie von A.N. Tucker), und von einer gemeinsamen Herkunft der semitischen und kuschitischen Sprachen kann hinsichtlich dieser Komponenten kaum die Rede sein."

Cushitic grammatical systems with so many genetically inherited common traits.<sup>95</sup> But Tsereteli equally refrained from regarding the nature of relationship between Semitic and the African branches mistreated here as one single “Hamitic” (!) unit in the traditional family-tree model.<sup>96</sup> Instead, he advances his own new, so-called *allogenetic model*<sup>97</sup> (elaborated on the example of some western and central Asian languages),<sup>98</sup> whose principles were established by the author elsewhere.<sup>99</sup> As a result, he invented a model of two originally distinct, albeit areally convergent families producing a mass of regular

<sup>95</sup> Tsereteli (1970: 273): “Andererseits ist es schwer, C. Brockelmann in seiner Meinung beizupflichten, die semitischen und hamitischen Sprachen als einen gewöhnlichen Sprachenbund zu kennzeichnen, der als Ergebnis gegenseitiger Einwirkung ursprünglich unverwandte Sprachen entstanden sei. So kann man sich z.B. sich nicht leicht vorstellen, daß das oben angeführte System der Konjugation der Bedaue-Sprache aus dem semitischen entlehnt ist, denn es ist unwahrscheinlich, daß die Konjugation des Verbs und des Personalpronomens aus anderen Sprachen entlehnt worden waren, während die übrigen Sprachgebiete (Lexik und dergleichen) nicht beeinflusst wurden.”

<sup>96</sup> He even misunderstood Brockelmann’s refusal of the Hamitic unity (Tsereteli 1970: 273): “Unserer Meinung nach hatte C. Brockelmann recht, als er die Existenz einer einheitlichen hamito-semitischen Sprachfamilie bestritt: die Beziehungen dieser Sprachen zueinander als Sprachenbund in gewöhnlichem Sinne zu betrachten, scheint jedoch nicht möglich zu sein.”

<sup>97</sup> Tsereteli (1970: 273): “Unseres Erachtens wäre es am besten, das Problem der Beziehungen zwischen den semitischen und hamitischen Sprachen im Lichte der *allogenetischen Theorie* zu betrachten, deren Grundsätze” he laid down himself.

<sup>98</sup> Tsereteli (1970: 276-277): “So ist z.B. schon seit langem der zweigliedrige Charakter der armenischen Sprache bekannt, der in gewisser Hinsicht einen echten indoeuropäischen Charakter aufweist ... aber nicht frei ist von vielen Charakterzügen der Sprachen des kaukasischen und vorderasiatischen linguistischen Areals.” Tsereteli’s model was thus neatly working in the ambiguous *Sprachgeschichte* of Armenian.

<sup>99</sup> See Tsereteli’s paper in the Russian journal *Voprosy Jazykoznanija* 3 (1968), 3ff. Its basic idea was outlined in 1970 as follows (Tsereteli 1970: 273-275): Assuming “die Existenz zweier verschiedener Sprachen x und y ..., die, außer einzelnen isomorphen Formen, nichts gemeinsam miteinander haben. Jede von ihnen kann während der Divergenz-Prozess in zwei verschiedene Gruppen, z.B.  $x > A, B$  und  $y > C, D$  zerfallen. Diese letzteren zerfallen ihrerseits in E, F; G, H und weiter in  $E_1, E_2; F_1, F_2; G_1, G_2; H_1, H_2$  usw., und andererseits zerfällt die Sprachgruppe y durch C, D in K, L, M, N und dann entsprechend in  $K_1, K_2; L_1, L_2; M_1, M_2; N_1, N_2$ . ... Auf einer gewissen Stufe des Entwicklungsprozesses kann die Sprache  $H_2$  die Abzweigung der Sprache  $K_1$ -R stark beeinflussen. Somit kann die Sprache R, als Ergebnis einer direkten Entwicklung  $Y > C > K > K_1$  gleichzeitig von dem Inventar  $H_2$  überschichtet werden, welches über  $H_2, H$  und B zur Sprache X geht. Diese Sprache (R) wird im Ergebnis ... regelmäßige Entsprechungen zu den Sprachen der Gruppe Y aufweisen, andererseits befindet sie sich in einem bestimmten gesetzmäßigen Zusammenhang [footnote omitted] mit den Sprachen der Gruppe X. Auf dieser Entwicklungsstufe ... kann ... noch von keiner zweiseitigen Verwandtschaft dieser Sprache die Rede sein. Späteren Überschichtungen, entlehnt aus der Sprache  $H_2$ , können leicht vom ursprünglichen Inventar getrennt werden, das zu Y führt ...” In his view (p. 275), this phase is reflected by “einige vom Arabischen stark beeinflusste türkische und iranische Sprachen, in denen die Zahl arabischer Elemente eine enorme Höhe erreicht; eine längere und unmittelbare Einwirkung beeinflusste ebenfalls die Morphologie und Phonologie ... einiger tadschikischer und turkmenischer Mundarten. Aber schon die nächste Abzweigung der Sprache R in der zweiten (S) und besonders der dritten (T) und den nachfolgenden ( $T_1, T_2$ ) Generationen wird ebenfalls bestimmte reguläre Beziehungen zu den Sprachen der Gruppe X an dem Tag legen, wenn der von der Sprache R entlehnte Stoff in ihr erhalten blieb ... Diese Übereinstimmungen aber werden einen ... diffusen und ... sporadischen Charakter aufweisen im Vergleich zu dem Teil der Sprache, der zur Gruppe y führt. Das Bild kann noch komplizierter werden, wenn die Zwischenstufen der Entwicklung zwischen R – S – T und  $T_1, T_2$  von seiten einer Sprachgruppe, z.B. Z, beeinflusst werden oder auch von seiten einer verwandten Sprache derselben Gruppe, z.B.  $L_2$ .”

and genetic-looking isoglosses.<sup>100</sup> This is how he meant to render a number of akin traits not explainable from the genetic comparison within the closer context of a language family.<sup>101</sup> He was aware of the limits by how far the validity of this allo-genetic model reaches.<sup>102</sup> For the arising question of an allo-genetic connection of the chosen languages,<sup>103</sup> Tsereteli (1970: 277) could obviously find no uniform answer. The only way was for him to decide on individual basis.<sup>104</sup> He classed the nature of linguistic connections in a more complicated bipolar multi-branch model.<sup>105</sup> Tsereteli (1970: 277) found his allo-genetic theory suitable for ambiguous or complex (semi-genetic, semi-areal) linguistic ties between certain languages.<sup>106</sup> The case of Hittite and the other languages of the Anatolian branch, specially positioned within IE,<sup>107</sup> reminded Tsereteli (1970: 277) precisely of the case Afro-Asiatic, conceived by him as a *Sprachbund* of Semitic vs. the

<sup>100</sup> Tsereteli (1970: 275): "... Somit werden bei Sprachen, die direkt von einer bestimmten Gruppe abstammen mit Hilfe einer konvergenten Entwicklung mit einer oder mehreren Sprachgruppen ebensolche oder fast dieselben gesetzmäßigen Beziehungen entstehen wie auch mit der verwandten Gruppe. Diese Sprache erhalten somit vielfältige genetische Beziehungen, die wir allo-genetische ... nennen. [footnote omitted] Selbstverständlich kann ein Teil des Inventars von Sprachen, die allo-genetische Beziehungen zu zwei verschiedenen Sprachgruppen aufweisen, einer Quelle entstammen, ein anderer Teil einer anderen Quelle. Manchmal können sogar ein und dieselben Elemente zu verschiedenen Quellen gehen."

<sup>101</sup> As rightly observed by Tsereteli (1970: 276), "beim Studium jeder Komponente im Vergleich mit der entsprechenden Sprache sehr oft Sprachgut übrigbleibt, das zu keiner der angenommenen Quellen gerechnet werden kann. Der Rest, der auf Grund zweier Komponenten nicht gedeutet werden kann, muß als Innovation erklärt werden, als das Ergebnis selbstständigen Entwicklung oder als dritter Bestandteil, der einer unbekannten Quelle angehört ..."

<sup>102</sup> Tsereteli (1970: 276): "... die Sprachbünde, die als Ergebnis von Kontakten und gegenseitiger Einwirkung in bestimmten linguistischen Arealen entstehen, es nicht immer zu allo-genetischen Beziehungen bringen können. Von allo-genetischen Beziehungen kann nur dann die Rede sein, wenn in einem bestimmten Entwicklungsstadium zwischen den Sprachen  $T_1$  und  $T_2$  und den Sprachen der Gruppe X in einem Teil des Sprachguts ein regelmäßiger Zusammenhang auf verschiedenen Stufen linguistischer Hierarchie stattfindet und wir gleichzeitig damit in einem anderen Teil ebensolche regulären Beziehungen zu einer anderen Sprachgruppe (Y) haben. ... Die Sprachbünde können zu allo-genetischen Beziehungen führen, sie können aber auch existieren oder zerfallen, ohne daß dabei Sprachen mit zwei- oder vielseitigen Verwandtschaftsbezeichnungen gebildet werden können."

<sup>103</sup> Namely, "welcher Sprachgruppe kann die Sprache, die in allo-genetischen Beziehungen zu zwei verschiedenen Gruppen steht, zugeordnet werden, der Gruppe Y oder der Gruppe X?" (Tsereteli 1970: 277).

<sup>104</sup> Namely, that there "muß hier in jedem Einzelfall eine besondere Entscheidung getroffen werden. Es ist sehr wichtig zu klären, inwieweit sich die Struktur einer Sprache, die lexischen Elemente miteinbezogen, infolge der Kontakte verändert hat" (Tsereteli 1970: 277).

<sup>105</sup> Namely, as follows: "1. Rein genetische Beziehungen ... in der Gruppe X oder Y, und eine direkte Entwicklung im Rahmen der entsprechenden Gruppe. 2. Allo-genetische Beziehungen der Sprachen, die einerseits direkt zu den Sprachen der Gruppe X führen, die aber andererseits in einem bestimmten Teil ebenfalls reguläre Beziehungen aufweisen als Ergebnis der Verwandtschaft mit Sprachen einer anderen Gruppe (Y). 3. Reine Bundesbeziehungen, die dem Charakter nach verschiedenartige Sprachenbünde bilden, die aber gleichzeitig ... keine genetischen Beziehungen zu irgendwelchen bekannten Sprachen zeigen oder deren Inventar keine regulären Beziehungen zu anderen Sprachgruppen aufweist." (Tsereteli 1970: 276).

<sup>106</sup> Considered by Tsereteli (1970: 277) as "eine Erklärung dafür, weshalb ... Sprachen in einem Teil eine reguläre Ähnlichkeit an den Tag lege, in anderen Teil aber so verschieden sind, daß die Wahrscheinlichkeit einer gemeinsamen Herkunft fast ausgeschlossen ist."

<sup>107</sup> Which, according to Tsereteli's (1970: 276) estimation, "in vielen Fällen weiter entfernt vom proto-indoeuropäischen Zustand befand als die früher bekannten indoeuropäischen Sprachen".

African (sic) branches (where he failed to recognize branches and kept mislabelling as “Hamitic” in the worst “Hamitological” fashion in spite of lacking common traits for such an alleged unity)<sup>108</sup> In his conclusion (Tsereteli 1970: 278), he released but a bunch of the most comfortable common places (as is so typical with such theoretical papers promising or demanding further research due to lack of real work with real data).<sup>109</sup> But where is Tsereteli’s share in this work? One cannot see whether he has undertaken the painstaking labour of thoroughly assessing Cohen’s and others’ (also!) Sem.-Brb./Cu./Ch. isophones, -morphs and -glosses. Apparently, it did not even take place. No trace of it is to be found in the paper in question. First praxis and then theoretical conclusions – this principle has so comfortably been ignored throughout the whole history of AA studies.

**1.5.15. H.-J. Sasse** (1981: 135, §2.3), strangely, saw in the *Essai comparatif* a new beginning due to two reasons: (1) Cohen’s support of the sister-family hypothesis,<sup>110</sup> although a classificatory position can hardly compensate for the multitude of doubtful comparanda (Hintze in §1.5.10 above); (2) Cohen’s being allegedly the first to elaborate regular consonantal matches,<sup>111</sup> which is doubly untrue, since, on the one hand, the primacy in establishing some phonological rules among the branches clearly belongs to others like, most importantly, A. Erman in Egypto-Semitic and W. Vycichl in Egypto-Berber-Cushito-Hausa, while, on the other hand, the way how the historical consonantism is treated in the *Essai comparatif* is by far not to serve as a model (Hintze in §1.5.10 above) given the eclectic practice of regularly confusing several distinct roots pressed together in one single entry hardly permitting to set up any solid rules. But ignoring all such serious defects, was satisfied with a general hint on them.<sup>112</sup> He only blamed Cohen

<sup>108</sup> Tsereteli (1970: 277): “In eben dieser Weise stellen wir uns die Wechselbeziehungen der semitischen und sogenannten hamitischen Sprachen vor.”

<sup>109</sup> A.o., Tsereteli (1970: 278) states that “alle Versuche z.B. der Feststellung von Beziehungen der kuschitischen Sprachen (oder der hamitischen überhaupt (sic)) zu semitischen und anderen Sprachen kann erfolgreich sein können, solange wir keine Charakteristik ihrer Struktur haben. ... erst nach Absonderung ihrer Bestandteile können die Beziehungen zu verschiedenen Sprachen ... bestimmt werden. In dieser Hinsicht wird dem strukturell-typologischen Studium der Sprache eine besondere Bedeutung beigemessen. ... die vergleichende Typologie hat ebenfalls große Bedeutung für die Festlegung struktureller Besonderheiten, die für verschiedene Sprachsysteme kennzeichnend sind, unabhängig von Zeit und Raum. Die vergleichende Typologie gibt uns die Möglichkeit, die isomorphen und allomorphen Erscheinungen in verschiedenen Sprachgruppen ... zu zeigen und die Berührungspunkte zwischen verschiedenen verwandten und nicht verwandten Sprachen festzustellen.”

<sup>110</sup> Sasse (1981: 135, §2.3): “Der eigentliche Durchbruch und damit der Beginn der modernen Epoche der vergleichenden afroasiatischen Sprachforschung kam erst 1947 mit Marcel Cohens vielbeachteten Werk ‘Essai comparatif ...’. Die schon 1933 von M. Cohen vorgetragene These über die vier gleichberechtigten Unterfamilien des Afroasiatischen wird hier wieder aufgegriffen; in einigen Fällen wird auch das Hausa (Tschadisch) verglichen, ohne daß seine Zugehörigkeit voll akzeptiert wird.”

<sup>111</sup> Sasse (1981: 135, §2.3): “...Anhand von 525 Wortzusammenstellungen versucht Cohen zum ersten Mal regelmäßige Lautentsprechungen zwischen den einzelnen Untergruppen festzustellen.” This is in contrast to Sasse’s (1981: 136, §2.3) statement: “Für das Berberische und das Kuschitische macht sich der Mangel an Kenntnis der historischen Lautlehre innerhalb der Gruppen schmerzlich bemerkbar. Damit fällt eine große Anzahl der vorgeschlagenen Etymologien, doch ist der verbleibende Grundstock an plausiblen Gleichungen immer noch beachtlich.”

<sup>112</sup> Sasse (1981: 135-136): “Wie jede Pionierarbeit ist Cohens Werk mit zahlreichen Mängeln behaftet.”

for relying on the GÄSW in matters of Egypto-Semitic comparative phonology, whereas he was researching the problem in other branches elsewhere.

**1.5.16. W.A. Ward** (1985: 243, §V), convinced that by “a wide chronological range in the written evidence, we are presented with very dubious comparisons”, quoted as an example from M. Cohen’s dictionary (1947: 175) the equation of Eg. bj3j “to remove oneself” with Bed. bar “to leave, quit”, which Ward rejected for the alleged anachronism of the implied “phonetic shift of Semitic r/l to Egyptian 3, a shift which ceased to take place shortly before the Eighteenth Dynasty (Ward 1976:157). This means that Bedja bar would retain a form unattested before modern times which must be projected back at least to the first half of the second millennium BC” and also “that either bar belongs to the prehistoric stage of Afroasiatic or, if it is a North African word, that the shift of r to 3 also operated there at some unspecified time in the past.” Still, for Ward, “these are highly doubtful assumptions which make this equation **impossible**” (!). These hypercritical arguments are ill-founded, since nothing suggests that we should conceive the Bedja verb as a loan from Egyptian but on the contrary: their cognacy appears much more natural.

**1.5.17. W. Schenkel** (1990: 42) too, regarded Cohen (1947) as an *entrée* “der in der Tat das ist, als was er sich im Titel vorstellt: ... eine Sondierung. Es ist ein mutiger, perspektiven öffnender Anstoß, kein Abschluß.” But why he thinks so, he failed to specify. Which is why this kind of appraisal is no worth more than a typical common place. How much this is a misconception becomes clear from the position taken by the thorough appraisal by his Rösslerian fellow, R.M.Voigt (2001: 1322, §5, below) who, by his careful comparative analysis fully understood the signification of Cohen’s (1947) work that only encompasses and summarizes, in a way, all the uncertainties, vacillations of his long era in those many decades preceding 1947 when, for some mysterious reasons, almost exclusively working purely without a rigorous neo-grammarian methodology was a commonly accepted practice, so it can only be considered as a closing act, a culmination of the eclectic era of multi- and omnicomparatistic “methods” with no strict rules opened by L. Reinisch, C. Meinhof, E. Zyhlarz and others. If one knows their output in the comparative AA lexicon, one can painfully and only come to realize that M. Cohen yielded in his admirable *magnum opus* hardly anything **essentially** new in terms of **quality**. This is what the *Essai comparatif* effectively accomplishes, which itself was a huge task.

**1.3.18. M.L. Bender** (1995),<sup>113</sup> in the handout to his university course (SIU) on the outlines of AA, managed to offer a very brief and objective summary on Cohen 1947: “... it presents comparisons, not reconstructions, and for Chadic, refers only to Hausa. It is also not very good, having a Semitist bias and permitting rather loose phonological and semantic correspondences (though, to be fair, Cohen often expresses skepticism about these). ... In the class, I will present a few of Cohen’s best examples. These usually include Berber, Semitic, Cushitic, and Egyptian, since he used only Hausa ... and did not separate Omotic from Cushitic.”

<sup>113</sup> In a handout for the whole 1995 spring semester of his university course on AA linguistics, SIU, Carbondale.

**1.5.19. C. Peust** (1997: 251) too, was short in his evaluation unfairly demanding half a century after Cohen's *Essai comparatif* the presently available sources and methodological standards known (???) today<sup>114</sup> and not the sub-level reconstruction plausible in certain branches (Berber, East Cushitic) on the basis of the sources accessible already in Cohen's day, let alone for the neo-grammarians IE comparative method sharp-sightedly demanded by F. Hintze (1951) almost five decades earlier.

**1.5.20. R.M. Voigt** (2001: 1322, §5) was absolutely right in regarding the *Essai comparatif* as the end of an era and in arguing why it can only be conceived in that way:<sup>115</sup> (1) collecting a considerable part of the Egypto-Semitic and "Hamitological" equations can itself (2) hardly be regarded as a milestone due to its failure to elaborate the expected rules of historical phonology for the available groups charted in the lexicon. Perfectly correctly stated.

**1.5.21.** Possibly another far-reaching effect of the *Essai comparatif* working until the present day and perhaps not yet isolated and examined specially in any of the histories of SH comparative linguistics was to legitimize by its authority the survival of omnicomparatistic methods without any peculiar sound laws or with rules permitting the same attested in the AA etymological works by numerous authors (like C.T. Hodge, Ch. Ehret, N. Skinner) from the second half of the 20th century discussed under the Greenbergian trend (in Episode VIII of this series).

### Abbreviations

AA: Afro-Asiatic, Akk.: Akkadian, Aram.: Aramaic, Ar.: Arabic, Eg.: Egyptian, GLECS: Groupe Linguistique d'Études Chamito-Sémitiques, Hbr.: Hebrew, IE: Indo-European, NAA: North Afro-Asiatic, AA: South Afro-Asiatic, Sem.: Semitic, SH: Semito-Hamitic, Syr.: Syriac.

<sup>114</sup> Peust (1997, 251): "Cohen konnte nur einen Bruchteil der heute bekannten afroasiatischen Sprachen auswerten, sein Material war häufig unexakt, und die theoretische Basis genügt heutigen Ansprüchen nicht." But this is only natural and cannot *eo ipso* diminish the values of Cohen's research. **Not this** is the problem with his *Essai comparatif*.

<sup>115</sup> Voigt (1988: 162, §IV): "Die Epoche der vergleichenden Semito-hamitistik, die nach Meinhofs Hamitenbuch einsetzt und sich durch Arbeit an Einzelproblemen auszeichnet, möchte ich mit Marcel Cohen ... abschließen lassen." Voigt (2001: 1322, §5) almost literally maintained his own assessment more than a decade later also: "Die Bedeutung dieses Werks liegt weniger in den vorgeführten Wortgleichungen als in seinem programmatischen Charakter. Eine vergleichende Betrachtung des sh. Sprachschatzes erscheint von nun an als lohnendes Ziel. Dabei hat Cohen die Aufgabe aber bei weitem unterschätzt, indem er nur verschiedene Gleichungen zusammenstellte, ohne die lautgesetzlichen Besonderheiten der Sprachgruppen zu beachten." Only the 1988 final remarks were not repeated in his 2001 evaluation: "Einige wenige Gleichungen aus lautlich so verschiedenen Sprachgruppen wie dem Semitischen, Ägyptischen und Kuschitischen begründen keine Lautgesetze, so lange nicht die lautlichen Besonderheiten der einzelnen Sprachen und Sprachgruppen bestimmt sind." Perfectly right.

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