

**О. В. Столбова**

**Лексическая база данных  
по чадским языкам**

**Выпуск VI**

*Губные b, f, p*

**Olga Stolbova**

**Chadic Lexical Database**

**Issue VI**

*Labials b, f, p*

**INSTITUTE OF ORIENTAL STUDIES  
RUSSIAN ACADEMY OF SCIENCES**

**Olga Stolbova**

**CHADIC LEXICAL DATABASE**

**ISSUE VI**

**Labials**

***b, f, p***

MOSCOW  
IV PAN  
2020

РОССИЙСКАЯ АКАДЕМИЯ НАУК  
ИНСТИТУТ ВОСТОКОВЕДЕНИЯ

**О.В. Столбова**

**ЛЕКСИЧЕСКАЯ БАЗА ДАННЫХ  
ПО ЧАДСКИМ ЯЗЫКАМ**

**Выпуск VI**

*Губные*

*b, f, p*

МОСКВА  
ИВ РАН  
2020

ББК 81.2  
С 81

*Ответственный редактор*  
д. филол. н. А.И. Коган

*Рецензенты*  
д. филол. н. А.Г. Белова  
к. филол. н. Т.Г. Погибенко

*Утверждено к печати*  
*Редакционно-издательским советом*  
*Института востоковедения РАН*

### **Столбова О.В**

**С 81** Лексическая база данных по чадским языкам. Выпуск VI. Губные b, f, p = Chadic Lexical Database. Issue VI. Labials b, f, p/ Отв. ред. А.И.Коган. Ин-т востоковедения РАН. – М.: ИВ РАН, 2020. –242 с.

ISBN 978-5-907384-34-7

Монография представляет собой очередной выпуск серии «Лексическая база данных по чадским языкам. Это 360 этимологий с начальными губными согласными – прачадские корни и их когнаты в семитских, египетском, кушитских, мотских и берберских языках. Работа представляет интерес для специалистов по чадским и афразийским языкам и языкам Африки.

ISBN 978-5-907384-34-7

© Столбова О.В., 2020  
© ФГБУН ИВ РАН, 2020

## Введение

Основной задачей шестого выпуска<sup>1</sup> «Лексической базы данных по чадским языкам» является представление в виде этимологических статей чадской лексики с губными согласными в начальной позиции. Чадская лексика с начальными губными согласными не раз становилась объектом исследования в афразийском контексте (GrL, AA I, II, EDE II, TN) однако во всех перечисленных работах задача состояла в обнаружении чадских параллелей к афразийским этимологиям. В нашем случае в фокусе исследования находится собственно чадская лексическая база. Результаты исследования чадской лексики с губными согласными представлены в работе В.М. Иллича-Свитыча [ISv], в которой на материале 12-ти чадских языков (которые были документированы к этому времени) реконструирована система прачадских губных согласных и установлены внешние когнаты для прачадских корней с губными согласными в анлауте и в инлауте. Однако с момента ее публикации (1966г.) количество языков, попавших в фокус исследования и объем чадской лексики увеличились в десятки раз, что повлекло за собой и изменения на всех уровнях реконструкции.

В настоящем исследовании наши усилия были направлены не только на реконструкцию чадских праформ (на основе регулярных фонетических соответствий) и поиска внешних когнатов, но и на выявление производной лексики с дальнейшим объединением всего “этимологического гнезда”. Атрибуция многих производных форм стала возможной на основе исследований в области исторической морфологии и лексической семантики. Сведения об исторической морфологии в сочетании с методом аналогии позволяют определить принадлежность производной формы к определенному “этимологическому гнезду” даже в отсутствие в словаре непродуцированной формы. Особое внимание было уделено и семантической составляющей – на основе проанализированного материала удалось выделить

---

<sup>1</sup> Предыдущие выпуски: Issue I. L, N, Ny, R, Issue II. Sibilants and sibilant affricates, Issue III. Lateral fricatives, Issue IV. Velars, Issue V. Gutturals.

характерные для чадских языков семантические сдвиги и на этой основе объединить некоторые лексические изоглоссы. В результате исследований по исторической морфологии и семантике удалось ввести в научный оборот значительную часть чадской лексики.

Установить регулярные фонетические соответствия, на которых основана вся этимологическая работа, возможно только на полной лексической базе. Как будет видно из следующих разделов, при таком подходе можно определить регулярный рефлекс, и выявить многочисленные факты влияющие на отклонения в отдельных группах или языках.

Настоящее исследование стало возможным во многом благодаря моим коллегам, которые предоставили в мое распоряжение или разместили на сайтах неопубликованные материалы по чадским языкам. Всем им я чрезвычайно признательна. Также я благодарна А.Г. Беловой за консультации по арабскому материалу.

### **Губные согласные в чадских языках.**

Трехчленная система афризийских губных согласных - *\*b*, *\*f*, *\*p* была постулирована еще в работе Дж. Гринберга [GrL]. Такая же система реконструируется и для прачадского. Основные, наиболее регулярные рефлекс, губных согласных в отдельных чадских языках, как и небольшое число корней можно найти в [CED]. Анализ всей лексики, с учетом нового материала по чадским языкам [Wff, JgN, GrPh, FrJ, FsM и нек. др.] позволяет внести некоторые уточнения и дополнения касающиеся, в частности происхождения губных *v*, *b*, *p*<sup>1</sup>, которые возникли на разных уровнях (ветвей, групп, отдельных языков) и под влиянием разных факторов. О их вторичном характере свидетельствуют следующие данные.

1. Звонкая фрикативная фонема (*v*) отсутствует в Hausa<sup>2</sup> и вост.-чад. языках гр. 5 (dangla-mubi), которые, как мы предполагаем, первыми отделились от чадской семьи, а также и в

---

<sup>1</sup> эта проблема в [CED] не рассматривалась.

<sup>2</sup> Здесь и далее названия чадских языков даются в латинице с заглавной буквы, названия групп и подгрупп – в латинице со строчной буквы.

не-чадских афразийских языках. Существенно, что *v* является позиционным вариантом сразу двух чадских губных - *b* и *f*, наиболее регулярно – в интервокальной позиции (в структурах *CVb/fVC*, а также после присоединения префикса к формам с начальным губным - *b/fVC*- > *Pref-V-b/fVC*-). Кроме того, как показывает собранный материал, семитским структурам *wfC* & *HfC* соответствует структура *v(w)C* в чадских языках. Достаточно часто веляризация *b* наблюдается при втором гуттуральном фрикативном (*bVH* & *fVH* > *vV(H)*), а также и в следующих случаях: *\*bin-* & *fin-* > *vin-*; *\*bu/ir-* > *v-r-*. Кроме того, и *v*, и *b* возникают при редупликации: *bVbV* > *bVvV* > *vVvV*; *bVHbVh* > *bVbVH* > *bVbV*.

2. О вторичности чадского имплозивного (или эйективного) *b* писал еще Дж. Гринберг<sup>3</sup> Это мнение разделял и М. Иллич-Свитыч, он полагал, что прачадский имплозивный *b* «развился из семито-хамитского *\*b* в тех случаях, когда в исходной семито-хамитской форме был представлен глоттализированный согласный (ларингал или глухой эмфатический), утраченный в чадском» [ISv: 30].

Гипотеза Дж. Гринберга о вторичность *b* (и *d*) подтверждается на собранном нами материале, гипотеза В.М. Иллича-Свитыча о позиционных условиях возникновения имплозивных также подтверждается, но с одной оговоркой – эти фонемы не восходят у прачадскому уровню.

1. Имплозивные *b* и *d* возникли не на прачадском уровне, а по мере исчезновения ларингалов. Вторичная эмфатизация может распространяться не на все языки, во-первых, и воздействовать на разные согласные словоформы, во вторых. См. след. примеры:

а. Формы в языках гр. *masa* (*Gizey*, *Ham*, *Lew*, *Musey*, *Marba*, *Masa bó* ‘fleurir, цвести’) и подгр. *dangla* (*Bidiya booy*, *Migama bòoyò* ‘fleurir’) несомненно являются когнатами и восходят к чад. *\*bVHVw*, но не к *\*bVw*-

б. *Mofu -bəd-* ‘laisser la place’ и *Kuseri bada* ‘to abandon’ несомненно являются когнатами арабского и сабейского корня *b’d* ‘s’éligner, удалиться’. Но при этом в *Mofu* и *Kuseri* эмфатизиро-

<sup>3</sup> “Regarding the distinction between *b* and *b*, for which there is at present no support outside of the Chad languages, it is safer to assume, until such evidence is forthcoming that the both continue a single original Proto-Afro-Asiatic phoneme” [GrL: 301f].

ваны разные согласные.

2. В корнях со вторым глухим эмфатическим, действительно, происходит ‘шифт/сдвиг эмфатизации’, или ‘вторичная эмфатизация’ ( $*bV\zeta > bVC$ ), но опять не повсеместно, а только в тех языках, где отсутствуют эмфатические согласные. В языках Hausa, warji, kotoko (в их консонантной системе есть такие фонемы как  $k$ , и  $\zeta$ ) вторичная эмфатизация не происходит, а формы типа  $bV\zeta$  и  $bV\zeta$  остаются без изменений.

3. Эмфатический глухой  $\dot{p}$  отмечен: а) в языке Goemai (гр. ngas); б) в языках Warji, Sagu, Mburku (гр. warji)

3.а. По мнению Г. Такача ([TAS: XXV],  $\dot{p}$  восходит к уровню праязыка гр. ngas (W 4), но сохранился как эмфатический только в языке Goemai в начальной позиции. Заметим однако, что именно в этом случае нотация разных авторов очень часто не совпадает, ср. след. примеры: Goemai *pang* ‘stone’ [Srl]<sup>4</sup> ~ *pang* ‘stone’ [Fp], *paŋ* ‘stone’ [JgN]; Goemai *pak* ‘to crash in a mortar’ [Srl] ~ *pak* ‘to flatten’ [Hlw], Goemai *pas* ‘rainy season’ [Srl] ~ *pas* ‘rainy season’ [Hlw]; Goem *puk* ‘calf of the leg’ [Srl] ~ *puk* ‘Wade’ [Jg], и мн. др., см. [TAS: 298-303]. Там же отмечено, что цитируемый выше словарь языка Goemai - [Srl] - составлен на материале одного из диалектов (‘based primarily on the Kwo dialect of Goemai’ [ibid. XVIII]). Учитывая, что ни в одном из хорошо описанных языков той же группы (Ngas, Mwaghavul, Murun) нет никаких следов эмфатического  $\dot{p}$ , эту фонему нельзя возводить даже к уровню праязыка группы нгас.

3.б. У немногочисленных форм с  $\dot{p}$ - в языках гр. warji есть внешние параллели, свидетельствующие о том, что  $\dot{p}$  восходит к сочетанию:  $p$ +ларингал или ларингал+ $p$ , например: гр. warji: Warji *pa-*, Mburku *pu-*, Kariya *paau* ‘родить’, центр.-чад. Gude *po* ‘родить’. Ларингал сохраняется в египетском языке: Eg  $p^{\zeta}$  ‘родить, рождаться’.

Как уже было сказано выше, для прачадского реконструируются три губные фонемы:  $*p$ ,  $*f$ ,  $*b$ . На афразийском уровне оппозиция: смычный – фрикативный для глухих губных была постулирована Дж. Гринбергом [GrL], установившим взаимно-однозначное соответствие между этими фонемами в

---

<sup>4</sup> Sirlinger. E. *Dictionary of the Goemai Language*. Jos, Nigeria, Prefecture Apostolic of Jos. 1937.

чадских языках гр. ngas и в древне-египетском. Эта гипотеза полностью подтвердилась и на новом материале по западно- и центральночадским языкам<sup>5</sup>.

### Рефлексы \**p* и \**f* в чадских языках.

**Западная ветвь:** \**p*, \**f* > *f*- в Hausa (гр.1), бинарная оппозиция (\**p* и \**f*) сохраняется в группах ngas, warji, ngizim (W 2, 4, 6). В языках bole (гр. 3): оппозиция сохраняется в Karekare, Ngamo, Bele, но с постепенным вытеснением *p*. В Volewa *p* & *f* различались по данным Й. Лукаса [LKB], в современном словаре [GAB] - только *p* (нельзя исключить, что это материалы разных диалектов). В Galambu, Tangale, Pero, Ma(a)ka, Bure, Bele чад. \**p* & \**f* > *p*-, в Kupto, Kirfi (и за небольшими исключениями - в Galambu и Gera) чад. \**p* & \**f* > *f*-.

В языках gon (W 7), и в языках zar (W 5) также происходит вытеснение *p* (при -*n*-, -*s*- во второй позиции или при конечном - *h*#). В этих группах нерегулярные рефлексы наиболее часты.

**Центральная ветвь:** основываясь на имеющемся в нашем распоряжении лексическом материале можно утверждать, что оппозиция смычный - фрикативный сохраняется во всех центральночадских языках (о позиционных изменениях см. ниже).

**Восточная ветвь:** оппозиция *p* ~ *f* сохраняется в языке Kera (гр. 1) и в Sokoro (гр. 4, с учетом короткого списка слов). Чад. \**p*, \**f* > *f*- в Mubi, Jegu, Birgit (гр. 5б), чад. \**p*, \**f* > *p*- во всех остальных вост. языках (гр. 2, 3, 4, 5а, 6).

В тех языках, где сохраняется бинарная оппозиция, наблюдаются нерегулярные рефлексы, и не всегда можно определить позиционные условия отклонений, особенно - при коротком слове (об озвончении Ch \**f*-: \**f*- > *v*- см. выше). Основные причины нерегулярных рефлексов это: регрессивная ассимиляция, диссимиляция и влияние гласного.

Регрессивная ассимиляция начального *p*- наблюдается:

а. при сибиллянте во второй позиции (\**pVs*- > *fVs*-) в языках warji (W 4), tera (C 1), mandara (C 5), kotoko (C 8);

б. при вторым велярном спиранте (\**pVh*/*ɣ*- > *fVh*/*ɣ*-) в гр. gon

---

<sup>5</sup> Заметим, однако, что Р. Гравина реконструирует для пра-центр.-чад. уровня только \**p*, с дальнейшим расщеплением на *p* и *f* во всех группах [GvPh: 232].

(W 7), *tera* (C 1).

Регрессивная ассимиляция начального *f*- наблюдается:

а. при дентальном во второй позиции: *\*fVt-* > *pVt-* в *Gude* (C 4), *\*fVt/d-* > *pVt/d-* в *Fali Kiriya* (C 3). В словаре [BIFK] нет ни одной формы вида *f-d* или *f-t*.

Регрессивная диссимиляция по глухости – звонкости наблюдается в центр.-чад. языках при сибиллянте/аффрикате или ларингале во второй позиции: *\*f-s-* > *v-s-*, *\*f-c/č-* > *v-c/č-*, *fVh-* > *vVh-*. В некоторых языках можно обнаружить оба варианта, например, *Mofu* *-fəč-* и *-vəč-* ‘enfumer, activer (le feu)’, *Mofu* *-fəh-* и *-vəh-* ‘revenir, retourner’. Есть основания полагать, что озвончение изначально возникло в корнях с сонорным в препозиции: *\*n-f-s* > *n-v-s* > *v-s-*.

В языке *Bana* (C 3) наблюдается диссимиляция двух фрикативных в кластере: чад. *\*fx-* > *Bana px-*, при этом формы с анлаутным кластером *fx-* в словаре не представлены.

Перехода *\*fVk-* > *vVk-* в гр. W 5-7, C 8 также объясняется диссимиляцией по глухости-звонкости.

Особый рефлекс губного согласного наблюдается перед гласным *u*: в *Hausa* *fu-* > *hu-*; sporadически тот же рефлекс наблюдается в языке *Ngamo* (W 3) и языках W 5, 7. В языке *Mina* (C 6) перед гласными *-u-* и *-o-* возможен только спирант (*fo-*, *fu-*) [FJ: 8].

### Рефлексы прачадского *\*b-*.

Чад. *\*b-* > *b-* во всех чадских языках (о многочисленных позиционных изменениях см. ниже).

Дж. Гринберг полагал, что в языках гр. *ngas* (Plateau) произошло оглушение начального звонкого чад. *\*b-* > Plateau *\*p*<sup>6</sup>. Свою гипотезу он выдвинул на основании следующих примеров:

1. *ngas*: *Goemai pin*, *Gerka pin* ‘house’ ~ Chadic: *Bolewa bin* ‘hut’, *Sokoro beeni* ‘to build’, Proto-Semitic *\*bny* ‘to build’.

2. *ngas*: *Chip*, *Goemai pit*, *Gerka pət* ‘monkey’ ~ Chadic: *Bolewa*

<sup>6</sup> “In initial position, The Plateau languages usually shifted the voiced stops of the non-Plateau Chad languages and the other Afro-Asiatic languages to the corresponding unvoiced forms. In a number of instances Plateau *p* corresponds to *b* elsewhere” [GrL: 297].

*biido*, Hausa *biri* ‘monkey’.

3. ngas: Ngas, Chip, Mwaghavul *po*, Goemai *puo*, Gerka *pa-k*<sup>7</sup> ‘mouth’ ~ Chadic: Bolewa *bo*, Hausa *baa-ki* ‘mouth’.

Дополнительный материал по языкам ngas указывает на то, что в данном примере велика вероятность оглушения по ассим. с показателем класса частей тела *-k*, и даже – в рамочной конструкции (*\*k-b-k*), см. Gerka *pa-k*, Tal *kà-phūu-x* ‘mouth’ [Jglb].

4. ngas: Ngas, Mwaghavul *paar* ‘night’ ~ Chadic Bolewa *boodi*, Ngamo *bedi*, Dera *biri* ‘night’; Cushitic Saho *bar* ‘night’.

В этом случае сопоставление кажется сомнительным по двум причинам. Во-первых, в абсолютном конце слова все чадские дентальные отражаются в языках ngas как *-t#*, но не как *-r#*). Так что когнатом (‘true cognate’) Bolewa *boodi*, Ngamo *bedi*, Dera *biri* ‘night’ является только одна форма (из публикации 2013г.): Gerka *pwót* ‘night’ [BIY]. Кроме того, новый материала по языкам ngas, указывает на иную исходную семантику. Вот как выглядит полный список релевантной лексики: Mushere *par* ‘day’, *kà-bar* ‘night’ [JgO], Ngas *paar* ‘night, the night time’, ‘also used when we should say ‘day’ – “we’ll meet another day’, *paar(n)paar* ‘very early in the morning (when it is still dark, but just before dawn)’ [F1], Ngas *paar* ‘night’ (and ‘day’), i.e. ‘the sunless part of the 24 hours’ day’, *mpaar mpaar* ‘very early, still dark, at dawn’ [JgN], Mupun *pár* ‘night, 24 hours period’, Gerka *pwót* ‘night’ [BIY], *piru* ‘night’ [F1], Mwaghavul *paar*, Chip *li-pàr* ‘night’ [Kr]. При таких значениях в отдельных языках, наиболее адекватной кажется исходная семантика ‘сутки, 24 hours period’, с последующим семантическим сдвигом: ‘часть суток’ > ‘ночь, день’.

В собранном нами и представленном в виде этимологий чадском материале с начальным *\*b-* есть лишь еще несколько случаев оглушения начального прачадского звонкого губного в языках ngas, а именно:

5. ngas: Mwaghavul *kə-fūrùm*, *fūrùm*, Ngas *ferem*, Mushere *bórùmò* [JgO], Goemai *fárám* ‘knee’. Ср. в гр. W 3: Boewa *bùrùm*, Gera *bùrmì*, Geruma *burmù*, etc.

6. ngas: Mwaghavul *pìt* ‘to put out fire, switch off light’, Ngas *pìt* ‘to put out fire’, Goemai *pìt* ‘extinguish smth’. Ср. В языке Hausa

---

<sup>7</sup> См. Hausa *ži-kí*, Ngas *še-uk*, etc. ‘body’, с показателем класса частей тела (*k*) в постпозиции, см. еще примеры в [StV].

*bíçè* (< *bite*) ‘to go out (lamp, fire), extinguish’.

7. ngas \**pwap* ‘kind of antelope’: Gerka *pwup*, Montol, Goemai, Chip *pap*, Mwaghavul *pàap*, Ngas *peep*, Mupun *páap*. Ср. в гр. W 3: Galambu *bùbà*, Karekare *bàwi*, Ngamo *bò’i* ‘kind of antelope’.

8. ngas: Goemai *pàap* ‘get hidden or lost’. Ср. в гр. W 3: Karakare *bàwu* ‘to get lost, disappear, die’ [GK]

9. ngas: Mupun *pú-pwáp*, Mwaghavul *pú-pwáp* ‘fish sp.’, Ngas *buup*, *bwoop* ‘fish’ (публикации 1915г.). Ср. в гр. С 8: Logone *bwabwa* ‘fish’.

10. ngas: Goemai *bi*, Mnt *be* ‘place’ (публикация 1911 г.), Goem *pè* ‘place’ (публикация 2013 г.). Ср. в гр. bole: Bolewa *bèyi*, Dera *bói* ‘place’.

Очевидно, что оглушение \**b* в языках гр. ngas регулярно наблюдается лишь по ассимиляции с конечным *-p* в формах с редупликацией: \**bV(w/y)* > *bVbV* > ngas *bVp#* > *pVp* (примеры 7-9). Регрессивное оглушение (по аналогии с предыдущим случаем?) возможно и по ассимиляции с глухим дентальным в абсолютном конце слова (примеры 2, 4, 6). Наконец, оглушение *b*- отмечено в именах с префиксом *k*- (примеры 3, 6). К последнему типу можно отнести и пример 1. Велярный префикс сохранился в центрально-чадских языках, а именно: Fali Bwagiru *kù-vun*, Wandala *bre* ‘hut’, *kù-vre*, Dghwede *ká-viré* ‘cornbin’ (*-n-* > *-r-* регулярно). Варианты одной и той же формы, приведенные в примерах 9-10, свидетельствуют о позднем характере перехода *b* > *p*.

Таким образом, можно сделать вывод о том, что за некоторыми исключениями и при наблюдаемой тенденции к оглушению, прачад. \**b* все еще сохраняется как *b* в языках нгас.

### Позиционные изменения начального \**b*:

а. Оглушение начального \**b* наиболее регулярно происходит в языках Voghom, Tal (W 5). В нескольких случаях глухой рефлекс показывают Tangale, Pero, Kupto (W 3), Tala (W 5), а также языки gon (W 7). По данным Ньюмана [Nm: 16], начальные смычные регулярно оглушаются в языках С 1 (кроме языка Tera).

б. В чад. языках плохо сочетаются звонкие смычные (*b* & *d*). В Kupto (W 3) регулярно происходит диссимиляция по месту образования: чад. \**b-d* > *f-d*. В значительном количестве языков -

W 4, 5, центр.-чад., E 1 - отмечена диссимилиация по способу образования  $*b-d > v-d$ ,  $*b-d > bVd$ .

с. В языках W 4 и нескольких центр.-чад. (Tera, Fali Kiriya, Podoko, Mafa, Sakun) отмечены единичные случаи  $*bVh/y- > vVh/y-$

d. Веляризации  $b-$  по ассимиляции с сибиллянтам или аффрикатой ( $*bVs/c- > vVs/c$ ) отмечена в языках W 4, 5, 6 и центр.-чад., в языках рон (W 7)  $*bVs > fVs-$ .

С появлением новых материалов по чадским языкам можно будет более точно установить причины отклонений от регулярной рефлексии. Например, они могут возникать из-за запрета или ограничения сочетаемости каких-то фонем в отдельных языках.

### **Структура этимологической статьи.**

Принцип организации материала остался прежним, а именно: объединять лексические единицы, которые: а) максимально близки (идентичны) с точки зрения семантики и б) по фонетическим параметрам могут иметь общий источник. Потенциально родственные корни даются под тем же номером с индексом а), б), и т.д. Производные слова даются отдельно, с указанием способа образования. Указывается тип этимологии - общечадская, на уровне ветви, на уровне подгруппы. Менее очевидные когнаты даются в рубрике "сравни".

Этимологическая статья начинается с реконструированной формы под звездочкой и предполагаемого исходного значения. Рефлексы по языкам упорядочены по ветвям (Западная, Центральная, Восточная), а внутри ветвей - по подгруппам.

Названия языков пишутся с заглавной буквы, названия групп - со строчной. Сокращения названий языков см. на стр. 26. После лексемы стоит значение по источнику и ссылка на источник (в квадратных скобках). Для языков, лексика которых всегда дается по одному и тому же источнику, подобная ссылка опускается. Список таких языков (и соответствующий каждому из них источник "по умолчанию") см. на стр. 239. Все отклонения от рефлексов, установленных ранее, отмечаются, даются пересылки при регулярно повторяющихся отклонениях и указывается их возможная причина.

После знака // приводятся внешние параллели. В качестве когнатов двухсогласных чадских форм рассматривались

семитские корни 'media geminata' ( $C_1C_2C_2$ ), а также корни с третьим, алефом, фарингальным ( $\text{ʔ}$ ,  $\text{ħ}$ ,  $\text{h}$ ) или полугласным ( $w$ ,  $y$ ) в любой позиции или с начальным  $n$ - (который и в семитологии признается "расширителем" двухсогласной ячейки).

Реконструируемые именные корни имеют структуру  $CV(V)$ ,  $CV(V)CV$  или  $CVC(V)CV$ . Многосложные глаголы -  $CV(V)C$ - или  $CV(V)C(V)C$ -, односложные -  $CV(V)$  (поскольку структура  $C$ - не позволяет различать между кратким и долгим гласным односложного глагола). Если в языках отмечены формы с кратким гласным, реконструируется праформа  $CV$ . Если лексические рефлексы по языкам имеют вид  $CV$ ,  $CV\text{?}V$ ,  $CVw(V)$  или  $CVy(V)$ , реконструируется двусложная форма со слабым согласным во второй позиции. Почти все глаголы вида  $C_1VC_2(V)C_3$ - являются производными от соответствующих  $C_1VC_2$ -. Исключение составляют глаголы с лексикализованным инфиксом мн.ч.  $-k$ - (в этих случаях  $C_1VkVC_3$ - восходит к  $C_1VC_3$ -) и с префиксом  $\text{ʔ}a$ -.

После внешних параллелей даются отсылки к общечадским реконструкциям Г. Юнграйтмайра и Д. Ибришимова [JgIb], и П. Ньюмана [Nm]< а также к уже имеющимся афразийским этимологиям, которые включают чадский материал. Особо выделяются все случаи, когда внешние когнаты к чадской этимологии уже были ранее установлены.

Основную часть публикации составляют полноценные этимологические статьи, их характеризует однозначная реконструкция на обширном чадском материале и (за редким исключением) надежная внешняя параллель.

Отдельным списком даются менее надежные (фрагментарные) лексические изоглоссы.

## Foreword

This issue continues the publication of Chadic Lexical Database. It is aimed to arrange Chadic data with labial initials in a kind of ‘etymological nests’, including the main form and derivatives and to supply such entries with external cognates. The research in the field of Chadic diachronic morphology help to identify derivatives in the lack of the main form in the corresponding word-list.

Afro-Asiatic roots with initial labial consonants not once were under discussion (e.g., GrL, AA I, II, EDE II, TN). However, the main goal of these and similar studies was to provide Afro-Asiatic etymologies with Chadic data. In our case, namely Chadic data is in the focus.

I am grateful to the colleagues who supplied me with their unpublished materials on Chadic languages or allowed the free access to their dictionaries, grammars, word-lists and other data.

My special thanks are due to Anna Belova for consultations concerning Arabic cognates. I appreciate my daughter Kate and my grandson Max who helped me to overcome problems provoked by my self-isolation.

## Introduction

### I. Chadic voiceless labials: *\*f*, *\*p*.

The AA system of labial consonants was under discussion in [GrL]. As Greenberg noted, the thesis of his paper was that “Egyptian distinction between /p/ and /f/ is original for AA, because a number of plausible etymologies show that the correspondence of Plateau<sup>8</sup> *p* and *f* to Egyptian *p* and *f* is highly probable” [GrL: 301]. Contradicting data has not been found. Further research proved that the AA distinction of voiceless labials (*p* & *f*) still preserves in most of Chadic languages. The reflexes of voiceless labials in individual Chadic languages are as follows.

**West Chadic:** reflexes of Ch *\*p* and *\*f* have fallen together as *f* in Hausa; the opposition (*p* vers. *f*) preserves as such in ngas, warji, ngizim groups (W 2, 4, 6). In the bole group: *\*p* & *\*f* > *p*- in Tangale, Pero, Ma(a)ka, Galambu, Bure, Galambu Bele, *\*p*- & *\*f*- > *f*- in Kupto

---

<sup>8</sup> Ngas-sura (=ngas) group of West Chadic (W 2).

and Kirfi, with a few exceptions – in Galambu and Gera). The opposition preserves in Karekare and Ngamo, but *f*- is overpowering. According to J. Lukas [LkB], the distinction was active in Bolewa, according to [GAB] only *p*-initial is attested.

In ron (W 7) and zar (W 5) reflexes are far from regular, *f*- prevails in our data (esp., in roots with a spirants or *n* in the C<sub>2</sub> position).

The basic opposition is active in the **Central branch**<sup>9</sup> (on violations due to specific environments see below).

**East Chadic:** the main opposition is active in Kera (E 1) and Sokoro (E 4). Chadic *\*p, \*f > f*- in Mubi, Jegu, Birgit, Kajakse, Toram, Masmaje (= E 5b, accord. to [NmC], but = E 7, accord to [JgIb]), Chadic *\*p and \*f > p*- in E 2, 3, 4, 5a (in [NmC], but 5 in [JgIb]).

It is likely, that the phonological system is tending to eliminate the opposition of initial voiceless labials, thus numerous violations of regular reflexes, is not a surprise, mostly due to assimilation/dissimilation or prefixation. It goes without saying, that with a short word-list the reason for a concrete violation is mostly obscure.

More frequently regressive assimilation of Ch *\*p*- may be motivated:

- a. by a sibilant as C<sub>2</sub> (*\*pVs-* > *fVs-*) in W 4, C 1, 5, 8.
- б. by a velar spirant (*\*pVH-* > *fVH-*) in W 5, C 1, 8, Musgu.
- c. Regressive assimilation of Ch *\*f* may be provoked by a dental as C<sub>2</sub> (*\*fVt-* > *pVt-*) in Gude (C 4), *\*fVt/d-* > *pVt/d-* in Fali Kiriya (C 3).

The regressive voiceless-voiced dissimilation: *\*fVk-* > *vVk-* is traced in W 5-7, C 8; similar dissimilation of two spirants, or of a spirant and an affricate (*\*f-s-* > *v-s-*, *\*f-c/č-* > *v-c/č-*) is attested in CChadic languages. Sometimes, the both variants still preserve, cf.: Mofu *-fəč-*, *-vəč-* ‘enfumer, activer (le feu)’; Mofu *-fəh-*, *-vəh-* ‘revenir, retourner’.

---

<sup>9</sup>According to [Gv: 232], however, “the position most consistent with the data is that in Proto-Chadic there was only *\*p*, and in Proto-Central Chadic there was still the one phoneme, but the phoneme had two allophones [f] and [p]. In the proto-languages of the groups within Central Chadic /f/ and /p/ became contrastive, as they are in almost all of the present-day Central Chadic languages”.

A specific reflex may be provoked by a round vowel: *fu-* > *hu-* is regular in Hausa and is traced sporadically in Ngamo (W 3) and in zaar languages (W 5). In Mina (C 6) “The labial voiceless stop *p* does not occur before round vowels *u* and *o*, but does occur before the vowel *a* and before schwa” [FJ: 8].

It is likely that labials tend to distribute according to their position (C<sub>1</sub> vers. C<sub>2</sub>): *f-*, but *-p-*, *-p#*. Note also W 3 Kupto, Kiffi *f-*, but *-pp-*.

## II. Chadic *\*b*

II.1. With a number of exceptions, Chadic *\*b-* preserves in daughter-languages. The most typical (but not exclusive) exceptions are as follows (for the situation in the ngas-sura gr. (W 2) see II.2. below):

a. Chadic *\*b-* quite often shows a voiceless reflex in Boghom (W 5), sometimes - in Pero, Kupto, Tangale (W 3), Tala (W 5). Chadic *\*b-* mostly preserves in roots with a voiced consonant as C<sub>2</sub> or in contact with a prefix. According to [Nm: 16], in Hona, Gaanda, Gabin (CCh 1) all Ch voiced obstruents show voiceless reflexes.

b. The following changes are due to incompatibility of two voiced plosives (*b* & *d*): *\*b-d* > *f-d* in Kupto (W 3), the shift: Ch *\*b-d* > *v-d-* is traced in a lot of languages (W 4, 5, CCh, E 1)

c. regressive spirantization may be influenced by a sibilant or an affricate: *\*bVs/c-* > *vVs/c* (noted in W 4, 5, 6 and in C Ch); in the ron group (W 7) *\*bVs* > [*vVs-*] > *fVs-*.

d. regressive spirantization of the type: *\*bVh/γ-* > *vVh/γ-* is traced in warji (W 4) languages and in a number of CChadic (Tera, Fali Kiriya, Podoko, Mafa, Sakun).

## II.2. Plateau languages = ngas-sura (W 2).

According to [GrL: 297] “In initial position, the Plateau (W 2) languages usually shifted the voiced stops of the non-Plateau Chad languages and the other Afro-Asiatic languages to the corresponding unvoiced forms. In a number of instances Plateau *p* corresponds to *b* elsewhere”. He also pointed, that Ch W 2 *b-* follows Ch *\*mb-* and that AA *\*b-* sometimes preserves in W 2 (e.g., Sem *\*bʕs* ‘bad’ is cognate with W 2 Ngas *bás*, Chip *bis*, Mwaghavul *biš* ‘bad’) [GrL:

301]. The following examples of the *\*b-* > *p-* shift in the W 2 group are given in [Gr: 297f]:

1. W 2 Goemai *pin*, Gerka *pin* ‘house’ ~ Bolewa *bin* ‘hut’, Sokoro *beeni* ‘to build’, Proto-Sem *\*bny* ‘to build’.

2. W 2 Chip, Goemai *pìt*, Gerka *pət* ‘monkey’ ~ Bolewa *biido*, Hausa *bírìi* ‘monkey’.

3. W 2 Ngas, Chip, Mwaghavul *po*, Goemai *puo*, Gerka *pa-k*<sup>10</sup> ‘mouth’ ~ Bolewa *bo*, Hs *baa-ki* ‘mouth’.

In this case (according to some additional data), devoicing may be provoked by a body-part’ suffix, or even, by a ‘confix’ (or ‘frame’) cf. Gerka *pa-k* and esp., Tal *kà-phūu-x* ‘mouth’ [JgIb].

4. W 2 Ngas, Mwaghavul *paar* ‘night’ ~ Bolewa *boodi*, Ngamo *bedi*, Dera *biri* ‘night’; Cush Saho *bar* ‘night’.

In this very case, forms in W 2 may not cognate with *\*b-d* ‘night’. The only exception is Gerka *pwót* ‘night’ (not mentioned in [GrL], but attested in [BIY]). Other forms rather follow W 2 *\*par* ‘24-hours period’ > ‘day’, ‘night’: Gerka *piru* ‘night’ [Fl], Mwaghavul *paar*, Chip *li-pàr* ‘night’ [Kr], Mushere *par* ‘day’, *kà-bar* ‘night’ [JgO], Ngas *paar* ‘night, the night time’, ‘also used when we should say ‘day’ – “we’ll meet another day’, *paar(n)paar* ‘very early in the morning (when it is still dark, but just before dawn)’ [Fl], Ngas *paar* ‘night’ (and ‘day’), i.e. ‘the sunless part of the 24 hours’ day’, *mpaar mpaar* ‘very early, still dark, at dawn’ [JgN], Mupun *pár* ‘night, 24 hours period’.

Note also that Chadic roots *\*CVd/tV* > W 2 *\*CVt#* (devoicing in auslaut, the same is true also for velars, labials and sibilants). Thus W 2 *-r#* < Ch *\*-d-* would be irregular.

The data collected and arranged in the present volume show few more cases of the same devoicing (Ch *\*b-* > W 2 *p-*).

They are as follows:

5. W 2 Ngas *pit*, Mwaghavul *pìt* ‘to put out fire, switch off light’, Goemai *pìt* ‘extinguish smth’. Cp. Hausa *bíçè* (< *bite*) ‘to go out (lamp, fire), extinguish’.

6. W 2 Mwaghavul *kə-fūrùm*, *fūrùm*, Ngas *ferem*, Mush *bórùmò* [JgO], Goem *fārám* ‘knee’. Cf. W 3: Bol *būrùm*, Gera *bürmì*, Geruma *burmù*, etc.

7. W 2 *\*pwap* ‘kind of antelope’: Gerka *pwup*, Mnt, Goemai, Chip

<sup>10</sup> Cm. Hausa *ži-kí*, Ngas *še-uk*, etc. ‘body’, on *-k-* as a body-part’ marker see [StV].

*pap*, Mwaghavul *pàap*, Ngas *peep*, Mupun *páap*. Cf. W 3: Galambu *bùbà*, Karekare *bàwi*, Ngamo *bò'ì* ‘kind of antelope’.

8. W 2 Goemai *pàap* ‘get hidden or lost’. Cf. W 3: Karakare *bàwu* ‘to get lost, disappear, die’.

9. W 2 Mupun *pú-pwáp*, Mwaghavul *pú-pwáp* ‘fish sp.’, Ngas *buup*, *bwoop* ‘fish’ (Fl, 1915). Cf. C 8 Logone *bwabwa* ‘fish’.

10. W 2 Goemai *bi*, Mnt *be* ‘place’ (Fp, 1911) Goemai *pè* ‘place’ (Hlw, 2013). Cf. W 3: Bolewa *bèyi*, Dera *bói* ‘place’.

In all other cases Ch *\*b-* preserves as such in W 2 – languages.

It seems evident, that the initial regularly devoiced by assimilation with the final *-p* in reduplicated forms: *\*bV(w/y) > bVbV > ngas bVp# > pVp* (examples 7-9).

Regressive assim. is also possible by assim. with a voiceless dental in auslaut (examples 2, 4, 5).

Lastly, devoicing may be provoked by a velar prefix (examples 3, 6). The first example, given in [GrL] may also be included in this group. The point is, that cognate forms in CCh languages show a velar prefix: Fali Bwagiry *kù-vun* ‘hut’, Wandala *kú-vre*, Dghwede *ká-viré* ‘cornbin’ (*-n-* > *-r-* is regular).

The following variants: a. Goemai *bi* (1911) ~ Goemai *pè* (2013) ‘place’ and b. Mwaghavul *baa* ‘to go back’ [BIM], *bàa* ‘zurückkehren’ [JgS], but *pà* ‘to return’ [Kr] also point to gradual devoicing in the ngas gr.

It is worth mentioning, that J. Greenberg himself pointed to cases contradicting to the idea of the total devoicing of Ch *\*b* in Plateau languages (see above).

### III. On the origin of *ḡ*, *b* and *v*.

1.a. As Greenberg noted, Goemai/Ankwe “has a phonemic distinction between glottalized (*ḡ*) and non-glottalized (*p*) unvoiced consonants’ [GrL: 298]. According to G. Takács, *\*ḡ* should be reconstructed for the Proto-ngas-sura level (W 2), but it “retained its emphatic feature only in W 2 Goemanoid languages in initial position” [TAS: XXV]. Note, however, that field data differs quite often in identifying this emphatic, see the following examples:

Goemai *ḡang* ‘stone’ [Srl] ~ *pang* ‘stone’ [Fp], *paŋ* ‘stone’ [JgN]; Goemai *ḡak* ‘to crash in a mortar’ [Srl] ~ *pak* ‘to flatten’ [Hlw],

Goem *puk* ‘calf of the leg’ [Srl] ~ *púk* ‘Wade’ [Jg],  
Goemai *pas* ‘rainy season’ [Srl] ~ *pas* id. [Hlw], etc., for more  
examples see [TAS: 298-303].

Viewing that a. the thesaurus compiled by E. Sirlinger [Srl] is  
“based primarily on the Kwo dialect” [ibid. XVIII], b. no trace of *p̣* has  
been found in perfectly documented languages of the same group, there  
is no reason to reconstruct *\*p̣* on the Proto-ngas-sura level.

1b. Languages of the warji group (Warji, Cagu, Mburku) have the  
same phonemic distinction (*p̣* vers, *p*). A few forms with *p̣*-initial are  
attested in [SkNB, BIS]. However, the examples so far collected show  
the following correlation: *p̣* in W 4 - *p* in other Chadic languages -  
*H-p / p-H* in external cognates.

Cf. Warji *p̣a-*, Mburku *p̣u-*, Kariya *paay* ‘to give birth’, CChadic Gude  
*poo* ‘to give birth’; Eg *p̣p̣* ‘gebären, geboren werden, to give birth,  
be born’.

2. The distinction between originally voiced and ‘imploded’  
(=implosive) voiced consonants is also referred to in [GRL]. The  
following statement is of special value: “Regarding the distinction  
between *β* and *b*, for which there is at present no support outside of the  
Chad languages, it is safer to assume, until such evidence is  
forthcoming that the both continue a single original Proto-Afro-Asiatic  
phoneme’ [GrL: 301f].

A hypothesis concerning the origin of *β* in Chadic languages was  
suggested in [ISv]. The author made a phonological reconstruction of  
Chadic labials, using data of 12 Chadic languages only (more or less  
documented at that time). As he wrote, Chadic *\*β* results from  
‘compensatory glottalization’, stemming from an original AA root  
containing *\*b* and a laryngeal or a glottalized consonant’ [ISv: 20].

This idea can be accepted with one correction, namely: *β* does not  
follow the Proto-Ch level, but developed gradually, in the process of  
laryngeal lenition in different branches and groups of Chadic languages.  
Empatization may be traced in a part of languages, or impact different  
consonants of one and the same Proto-Chadic root. Cf. the following  
examples:

a. Forms in the masa group: Gizey, Ham, Lew, Musey, Marba, Masa *βó*  
‘fleurir’ and in East Chadic: Bidiya *booy*, Migama *βòoyò* ‘fleurir’  
follow one and the same PCh form, namely, *\*bVHVw*, but not *\*βVw-*

- b. Mofu *-bəd-* ‘laisser la place’ and Kuseri *bada* ‘to abandon’, are ‘true cognates’ to each other and to Arabic and Sabaic *bʿd* ‘s’éloigner’. However, only Ch *\*bHd* can yield both reflexes, but not Ch *\*bVd-*.
- c. In roots with secondary emphatic consonants we observe the shift of emphatization (eg., *\*bVḵV > bVkV*) in case a language has no *ḵ* in its inventory. However, this shift doesn’t happen in Hausa, warji and kotoko languages (in all of them Ch *\*ḵ* preserves as such).

3. The voiced labial fricative (*v*) ‘has no support’ outside Chadic family and is lacking in Hausa and in ECh dangla-mubi gr. It is important to note that *v* serves as a positional variant of two Proto-Ch phonemes - *\*b* and *\*f*, most regularly – in inlaut (esp., in a secondary inlaut, caused by a prefix, attached to a form with an initial labial). Further loss of the prefix accounts for *v*-initials in various languages (*k-bVC > k-vVC > vVC*, *n-f-s > n-v-s- > v-s-*). Chadic forms of the *v(w)VC-* structure quite often correspond to *wfC* or *HfC* in Semitic languages. Velarization of *b-* and *f-* may be due to assimilation with a laryngeal as C<sub>2</sub>: *\*bVH- & \*fVH > vV(H)*, *v*-initials quite often appear in roots of the shape *bin-*, *fin-*, *bu/ir-* and in reduplicated roots: *f/b-c- > f/b-f/b-c- > f/b-v-C- > v-v-C-*.

### The structure of individual articles in the main set

The lexical material is organized along the following lines: an asterisked reconstructed form<sup>11</sup>, then its suggested meaning. The lexical data are arranged according to the branches, and within the branches -- according to groups. Names of individual languages are written with capital initials, while the names of the respective groups - with small ones. The semantics of an individual gloss may be omitted only if it coincides with the common one. The sources are quoted in square brackets (for references by default see p. 239), variants of language-names - in round brackets. After a double slash external parallels are given.

The reconstructed nouns have the shape CV(V), CV(V)CV or CVC(V)CV. Polysyllabic verbs have the shape CV(V)C- or CV(V)C(V)C-, monosyllabic - CV(V) (note that the C-shape does not allow us to mark the vowel length of monosyllabic verbs). In case individual languages mostly show CV or C<sub>1</sub>VC<sub>1</sub>V (reduplicated) forms, the CV-structure has been reconstructed for Proto-Chadic. In case individual languages show CV, CV'V, CVw(V) or CVy(V)-structures, we preferred to reconstruct a disyllabic verb with a "weak" consonant (?/ w/ y) in the C<sub>2</sub> position. Firstly, it reduced the number of CV and CVV verbs. Secondly, Semitic parallels to Ch CV<sup>?</sup>/w/y-verbs usually have CVHVw/y or CVw/yVH structure, thus Chadic CV<sup>?</sup>/w/y-shape for a preliminary reconstruction seems to be reasonable and adequate to the data.

C<sub>1</sub>VC<sub>2</sub>(V)C<sub>3</sub>-verbs are mostly derived from the corresponding C<sub>1</sub>VC<sub>2</sub>- ones, sometimes - from C<sub>2</sub>VC<sub>3</sub>- or C<sub>1</sub>VC<sub>3</sub>-ones. Only a few C<sub>1</sub>VC<sub>2</sub>C<sub>2</sub>- verbs has been reconstructed.

It was intended to make the membership within an entry as undoubted as possible. All kind of derivatives and related words are cited within sub-items (a, b, etc.) or under *Deriv.*, *Cf.* or *Note* (the latter marks a less reliable relation). Semantically identical items may be cross-referenced, in the view of their possible genetic relation .

Semantically identical items may be cross-referenced, in the view of their possible genetic relation.

---

<sup>11</sup> May be preceded by information of the local character of the item (W = attested in the West branch; C 5 = attested in the mandara group only, cf. classification).

Set II includes fragmentary attested Ch forms, mostly - with reliable cognates in Semitic, Egyptian or Cushitic languages. Entries in this set can serve as a basis for search throughout Afrasian languages.

**The list of Chadic Languages** embraces all Chadic languages whose lexemes are included in the text of the present issue. The names of the groups are written with a small letter, the names of the languages - with a capital one.

As to the membership and a more detailed classification see [Nm, NmC, BIC, BaJg, JgIb, GvCh]. In [BaJg, JgIb] Chadic languages were classified into three major branches: West, Central and East. However, according to P. Newman, the masa group (an integral part of the Central branch in the previous variant) should be classified as one of four branches of the family<sup>12</sup> (in addition to W, C, E).

The body of Chadic roots so far collected shows close affinity of masa data to that of other CCh languages (including some masa - musgu isoglosses). On the other hand, roots attested in West or/and East branches and in masa (and lacking more CCh data) are few. Note also that reflexes of PCh \*ʂ<sup>13</sup> (> Biu-Mandara \*ʂ, but masa \*s) cannot be taken as a classifying argument. Examples and arguments given in [StLat] introduce PCh \*ʂ, not as a PCh phoneme, but as a positional variant of Ch \*s, observed not only in CCh Biu-Mandara, but in WCh 5 as well (for a different solution see [Shy: 41]<sup>14</sup>). Thus, in the present volume masa is classified as a group within the Central branch (for similar opinion and more supporting evidence see [TrMs]). In listing groups of languages within the branches we mostly follow the classification and group-supporting numbering suggested in [JgIb]. However, the mandara group (a single unit in [JgIb]), is subdivided into two sub-groups (as in [Nm] and [NmC]). Lastly, ECh 5 dangla and ECh 7 mubi groups (in [JgIb]) form a single unit in [NmC]. This innovation, supported by phonological and lexical data, was also accepted in the present volume (as compared to my previous publications, E 5 is referred to as E 5a, E 7 - as E 5b). Note that the classification of R. Gravina differs greatly from [JgIb] and [Nm] (e.g., languages of the ‘big mafa’ gr. (CCh 7) are included into different sub-branches and major groups of Biu-Mandara [GrPh: 26f]).

---

<sup>12</sup> “I have decided not to include the Masa group in any of the three major branches but rather to consider it as a separate, independent category” [Nm: 8].

<sup>13</sup> “in addition to \*s, one had to reconstruct another sibilant for PC, for which I have adopted the symbol ʂ” [Nm 10].

<sup>14</sup> “As P. Newman first noted, the merger of PC \*ʂ with PCh \*s provides strong evidence against classification of the masa group as a subgroup of Biu-Mandara”.

## Chadic Languages

### I. West Chadic

#### *WCh-A*

1. Hausa
2. sura-angas: Ngas (Angas), Miship (Chip), Kofyar, Mwaghavul (Sura), Mupun (note Sura/Mupun in [NmC]), Mushere, Goemay (Ankwe), Montol, Gerka (Yiwom)
3. bole: Bolewa, Bele, Galambu, Gera, Geruma, Karekare, Ma(a)ka, Kirfi, Ngamo, Bure, Tangale, Dera (Kanakuru), Kupto, Pero

#### *WCh-B*

4. warji (North Bauchi): Warji, Diri, Jimbin, Kariya, Mburku, Miya, Siri, Tsagu; Pa'a
5. South Bauchi: Dott, Wangdai, Geji, Polchi, Buli, Zul, Zaar (Sayanchi), Guus, Guruntum, Tala, Jimi, Boghom, Kir, Mangas
6. bade gr.: Bade, Ngizim, Duwai
7. ron: Bokkos, Daffo-Butura, Sha, Mundat, Kulere (Richa in [RC]), Fyer; also: Mongar, Monguna, Karfa in [RC]

### II. Central Chadic

#### *Gongola-Higi*

1. tera gr.: Tera, (Pidlimdi dial. of Tera in [Kr]), Hwona (=Hona), Jara, Ga'anda, Gabin, Boka
2. bura: Bura, Chibak, Ngwahyi, Kilba, Margi, WMargi, Wamdiu, Hildi
3. higi : Higi Nkafa, Higi Baza, Fali Kiriya, Bana (presumably = Fali Gili [Kr]), (Higi) Hya, Kapsiki (=Higi Kamale), Higi Futu [Kr].
4. bata : Bachama, Bata, Gudu, Jimjimøn, Njanyi (= Nzangi), Tsuvan, Sharwa, Fali of Jilbu, Fali of Bwagira, Gude, Fali of Muchella in [Kr]

#### *Hill*

5. wandala: Wandala (Mandara), Malgwa, Glavda, Ngweshe, Podoko, Dghwede, Guduf, Gava, Gvoko, Chikide (dial. of Guduf),
- 5a. Chineni, Lamang, Hitkalanchi, Hide, Vemgo
6. daba: Daba, Musgoy (Mazagway), Buwal, Mina (Hina), Mbedam (Mbødam, Mbudum), Gavar
7. mafa: Mafa, Chuvok, Dugwor, Ouldem, Muyang, Mada, Moloko, Zulgo, Merey, Gisiga, Mofu, Mefele, Balda, Mbuko, Vame, Baka
- 7a. (?) Sakun [Sukur]

### *Riverain*

8. kotoko: Ngala, Makari, Affade, Gulfey Kusseri, Logone (Lagwan, Kotoko), Mazera, Zina (Maltam [Tr]), Buduma
9. musgu: Musgum [LkM], Munjuk, Mulwi, Mbara [Tr]
- 9a.(?) Gidar (Kada)
10. masa (according to [Shy:32]): Zumaya (Azumeina); north: Masa, Gizey (considered a dialect of Masa in [BIC]), Musey, Marba, Lew<sup>15</sup>, Ham ("la langue parlata nel villaggio di Ham, I cui abitanti" [LexC]; south: Mesme<sup>16</sup>, Peve, Dari<sup>17</sup>, Dzəpaw<sup>18</sup>, Ngide<sup>19</sup>, Hede<sup>20</sup>.

It is clear that referring any language to as "Zime" provokes misunderstanding (see Notes 5-7). Thus, in the present publication, contrary to [CLD I-IV], Zime Daria will be referred to as Dari, Zime Batna - as Dzəpaw.

### III. East Chadic

#### *ECh-A*

1. kera: Kera, Kwang, dial. Mobu, Ngam [Lns]
2. lele: Lele, Kabalai, Nanchere, Gabri, Dormo (dial of Gabri), Tobanga (Gabri Nord)
3. somray: Somray (Sibine), Tumak, Ndam
4. sokoro: Sokoro, Saba, Ubi, Mawa
- 4a. Barein (dial. Komiya, Giliya, Jalkiya, Janking)

#### *ECh-B*

- 5a. dangla: East Dangaleat, West Dangaleat, Central Dangaleat, Migama, Bidiya, Mabire
- 5b. mubi: Mubi, Zirenkel, Masmaje, Kajakse, Toram, Birgit, Jegu (according to [NmC], the last two should be classified within 5a)
6. mokilko: Mokilko.

---

<sup>15</sup> According to [PAz: II], Marba, Lew and Kulong form an Azumeina dialect cluster.

<sup>16</sup> This name is used in [JgZ], [NmC] and [Kr], but the same language is referred to as: Zime (Mesme) in [Shy 32-33], as Zime in [BIC].

<sup>17</sup> in [NmC, JgZ], but referred to as: Tari in [BIC], Zime in [Shy 48-58], ZimD in [JgIb], Zime Dari in [CLD].

<sup>18</sup> in [NmC, BIC], but referred to as: Batna in [JgZ], Lame in [Sa], ZimB in [JgIb], Zime Batna in [CLD]; according to [Shy 33], "Lame' or Dzəpaw in the southernmost dialect of Hede".

<sup>19</sup> in [Shy], but Ngete (Sorga) in [NmC, BIC, JgZ].

<sup>20</sup> in [Shy, BIC], but Herde in [JgZ, NmC].

## Abbreviations of languages and linguistic periods

**Ch -Chadic:** Afd - Afade, Azum - Azumeina, Bch - Bacama, Bgh - Boghom, Bid - Bidiya, Bnn - Banana, Bok - Bokus, Bol - Bolewa, Brg - Birgit, Bud - Buduma, C - Central, Ch - Chadic, Chb - Chibak, Chk - Chikide, Chn - Chinene, Chuv - Chuvok, DB - Daffo-Butura, Dng - Dangla, Dghw - Dghwede, Duw - Duwai, Dzpw - Dzəpaw, E - East, FB - Fali Bwagira, FG - Fali Gili = Bana, FJ - Fali Jilbu, FK - Fali Kiriya, FM - Fali Muchella, Gaa - Gaanda, GBade - Gashua Bade, Gbn - Gabin, Gdf - Guduf, Gdr - Gidar, Gis - Gisiga, Glm - Galambu, Goem - Goemay, Grk - Gerka, Grm - Geruma, Grnt - Guruntum, HB - Higi Baza, HF - Higi Futu, HGh - Higi Ghye, HN - Higi Nkafa, Hld - Hildi, HN - Higi Nkafa, Hs - Hausa, Hitk - Hitkalanchi, Jmb - Jimbin, Jmj - Jimijimen, Kaba - Kabalai, Kap - Kapsiki, Kar - Kariya, Klb - Kilba, Krf - Kirfi, Krkr - Karekare, Kul - Kulere, Kus - Kusseri, Kwn - Kwang, Lmn - Lamang, Log - Logone, Mghv - Mwaghavul, Mig - Migama, Mlg - Malgwa, MM - Masmaje, Mng - Mangas, Mnj - Munjuk, Mnt - Montol, Mok - Mokilko, Mol - Moloko, Mpn - Mupun, Mrg - Margi, Msg - Musgu, Mush - Mushere, Muy - Muyang, Mwl - Mwulyen, Nch - Nanchere, Ngm - Ngamo, Ngz - Ngizim, Nzn - Nzangi, Ould - Ouldem, Pod - Podoko, Plc - Polchi, S - South, Saya - Sayanchi, Skn - Sakun, Sok - Sokoro, Smr - Somray, Tng - Tangale, Tob - Tobanga, Tor - Toram, Tum - Tumak, W - West, Wrj - Warji, Wnd - Wandala.

**Berb** - Berber: ACE - Algérie centrale [NZ: XX], Ahag - Ahaggar, Awj - Awjila, Ghdm - Ghadames, Izns - Iznasen, MC - Maroc central [NZ: XX], Nef - Nefusa, Nig - dial. of Niger, Qab - Qabyle, Sen - Senhaja, Shin - Shinasha, Sghr - Seghrushen, Tawl - Taullemet, TIM - Touat, Tidikelt, Wlmd - Wlemmden, Wrgl - Wargla, Zng - Zenaga.

**Sem** - Semitic: Akk - Akkadian, Amh - Amharic, Arab - Arabic, Aram - Aramaic (Bib - Biblical, Imp - Jud - Judaic, Mand - Mandaic, Off - Official, Syr - Syriac), Eth - Ethio-Sem, Gaf - Gafat, Gur - Gurage, Hars - Harsusi, Hbr - Hebrew, Jib - Jibbali, Mhr - Mehri, MSA - Modern South Arabian, Phn - Phoenician, Pun - Punic, Qat - Qatabanian, Sab - Sabaic, Soq - Soqotri, Tgr - Tigre, Tna - Tigrinya, Ug - Ugaritic.

**Cush** - Cushitic: HECush - High East, Alg - Alagwa, Arb - Arbore, Bur - Burunge, Dah - Dahalo, Dob - Dobase, dull - dullay, Gaw - Gawwata, Goll - Gollango, Gor - Gorowa, Had - Hadiya, Irq - Iraqw, Kamb - Kambata, Ong - Ongota, Rend - Rendile, Sid - Sidamo, Som - Somali, Tsam - Tsamai (Tsamako), Das - Dasenech.

**Eg** - Egyptian.

**Om** - Omotic: Wolt - Wolaita, Shin - Shinasha, Yem - Yemsa.

**Linguistic periods:** Bab - Babylonian, Gr - Egyptian texts of Greco-Roman period, MA - Middle Assyrian, Med - Egyptian medical papyri, MK - Egyptian texts of the Middle Kingdom, NB - Neo-Babylonian, OA - Old Assyrian, Oakk - Old Akkadian, OK - Egyptian texts of the Old Kingdom, pB - post-Biblical, Pyr - Egyptian texts of the pyramids, Sarg - Egyptian texts inscribed on sarcophagi, SB - Standard Babylonian.

**Abbreviations:** adj. - adjective, adv. - adverb, assim. - assimilation, Caus. - Causative, coll. - collective noun, denom. - denominative, deriv. - derivative, dial. - dialect, dissim. - dissimilation, esp. - especially, gen. - general, gr. - group, idf. - ideofon, intr. - intransitive, irreg. - irregular, metath. - metathesis, obj. - object, pl. - plural, plurac. - pluractional, poss. - possessive, pr. - pronoun, pref. - prefix, redupl. - reduplication, regress. - regressive, sg. - singular, sbj. - subject, suff. - suffix, tr. - transitive, vers. - versus.

### Conventional signs

Glottalization is rendered with a dot under the letter: *ṭ, ṣ, ḳ* or (due to technical problems) with a quotation mark: *ts'* (alveolar sibilant affricate), *č'* (palatal affricate).

Chadic voiced implosive phonemes are noted as *b, d, dy* (in previous publications - *ḃ, ḋ, ḏy*).

Palatalization is noted with a hacek - *š, č, ž*.

Lateral fricatives are noted as *ɬ* (voiceless), *ɮ* (voiced), the way it is done in the majority of publications on Chadic languages, *ɬ'* (emphatic).

Voiceless velar fricative is noted as *x*, its voiced counterpart - as *ɣ*, voiceless laryngeal - as *h*, its voiced counterpart as *ɦ*. Voiced pharyngeal is rendered as <sup>ʕ</sup> (Arabic ع), voiceless - as *ħ* (Arabic ح), uvulars: voiceless *ħ* (Arabic ح), voiced *ğ* (Arabic غ). Glottal stop is noted as <sup>ʔ</sup>, but as *ʔ* in asterisked forms.

Velar nasal - *ŋ*, semivowels: *w, y*.

Long vowels are rendered by a double sign *aa*, open vowels *ε* and *ɔ*.

The following notation of tones is generally accepted for Chadic languages: *á* - high, *à* - low,

middle tone is either marked as *ā* or left unmarked (for example, in Hausa). In [Kr], R.Shuh and some other dictionaries only one of the two tones is marked (*á*), but low tone is left unmarked (*a*). In the present text we follow the notation of the sources (without any decoding).

## \*B

1. **\*b[a]y-** ‘to go, to pass’: W 1 Hs *bíyà* ‘to go, travel’; 4 Jmb, Miya, Mburku, Kar *ba-*, Tsagu *bə-* ‘to go’ [SkNB], Miya *ba* ‘to go’ [Sch]; C 4 Gudu *bəy* ‘to follow’ [Kr]; 7 Mada *ábà* ‘passer’; E 1 Mobu *be* ‘escorter’; 2 Tob *bà* ‘aller’, *bè* ‘accompany’; 4 Sok *baa* ‘gehen’, *baiba*, *bēe* ‘vorübergehen, to pass by’ [Luk]. Note C 6 Daba *vàa* ‘aller’; 9 Mulwi *vi* ‘aller’ (probably, < -vV < vVvV < bVvV < bVbV).

C **\*mbV** ‘to follow’: 1 Tera *mbú* [NmT]; 6 Mol *mbay* [FsM].

//Cush Beja *baay* ‘gehen’ [RBd], Om Wolt, Dawro, Gamu *b-* ‘to go’, Yemsa *bey* ‘leave’ [LmW: 311]. Cf. Sem Geez *bebaya* ‘go around, roam aimlessly, lust after’, *beba* ‘go around’ [LsG: 86].

a. **\*ba[w]-** ‘to go out’: W 4 Jmb *mba*, Siri *ba*, Miya, Kar, Tsagu *boo*, Mburku *baa-* ‘to go out’ [SkNB], Paa *mbá* to go out, germinate’ [MS], Miya *baw* ‘to go out, sprout’ [Sch]; C 2 Mrg *bà* [HfM: 22], Klb *bìyà* ‘to go out’ [MuK], 7 Mofu *-b-* ‘sortir, quitter’, Gis *be* ‘hinausgehen’. Derived noun: W 2 Goem *bo* ‘journey’ [Fp]; 6 Ngz *bùwà* ‘traveling, trip’, GBade *bùwà*, WBade *bùwān* ‘a trip’.

//Cush Burji *ba-* ‘to go out, appear, rise (sun, moon)’ [SsB], Afar, Oromo *baa* ‘fort-, weggehen, to go away’ [RA], Oromo *baʔa* ‘go out’ [Grg], Sid *baʔ-* ‘to out, away’ [LmW: 311].

Cf. №3 **\*baw/y-** ‘to grow, germinate’. The latter is hardly cognate with **\*ba[w]-** ‘to go out’. Likely, reflexes of two separate roots conflated in W 4 Paa and Miya.

2. **\*baw/?-** (or **\*bVwVʔ-**) ‘to come, return’: W 2 Mpn *bàa*, Mnt *ba* [Fp], Ngas *bèe* [JgN] ‘to return’, Mghv *baa* ‘to go back’ [BIM], *bàa* ‘zurückkehren’ [JgS], note *pà* ‘to return’ [Kr], Goem *bà* ‘to return (to somewhere) [Hlw]; 4 Wtj *buw*, Jmb *boo*, Miya *bu*, Kar, Mburku *buu*, Tsagu *boo* ‘to come’ [SkNB], Miya *buw* [Sch]; 7 Kul *bo* ‘to come’ [JgR] = Richa *bo* ‘to come’ [RC]; C 2 Tera *ba* ‘come’ [Kr]; 4 Gude *buʔu* ‘to arrive’; 5 Wnd *ba-* ‘to come’ [WfN]; E 1 Mobu *báyé* ‘entrer’, Kera *bì* ‘to come’; 4 Sok *óbee* ‘to come’ [Luk]. Cf. C 2 Mrg *bàbù*, *bù* (< bV6- < \*bVʔbVʔ-) ‘to walk’ [HfM: 23], E 5a MM *bo* ‘aller’.

//Sem Akk *bāʔu* from OA, OB on ‘to walk along, come in, come to meet’ [CAD b: 178], Ug *bʔ* ‘to enter, come, reach’, Hbr *bwʔ* ‘to enter, come’, Phn, Pun *bʔ* ‘to go, enter’ [DUL: 200], Sab *bwʔ* ‘to enter’ [Bl: 11], Arab *bwʔ* ‘revenir, retourner’ [BK I: 175], Geez *bwʔ* ‘enter,

penetrate', Tgr *bo<sup>2</sup>e*, Tna *bo<sup>2</sup>a* 'enter', etc. > Cush Beja *bi<sup>2</sup>* 'return home' [LsG: 114f]. Cf. Geez *məbwā<sup>2</sup>* 'entrance, coming'.

b. **\*m-ba(w/y)- 'to return, come'**: W 2 Mush *mbáa* 'to return, come; to have done already' [JgO], Ngas *umbai* 'to return' [Or], 4 Paa *mbu* 'to arrive, reach' [MS]; C 7a Skn *baave* [mbəva] [DS] 'to return', *mbá* 'to return, to turn' [ThS: 408]; 10 Gizey, Masa *mà*, Lew, Musey, Ham, Marba *mbà* [LexC], Masa *mba*, Peve, Hidé *mbu* 'to come' [Shy], Azum *mbeyu* 'to come here', Dzpw, Dari *mbù* 'venir, apporter' ('to come with').

c. **\*bVh** (possibly < *b<sup>2</sup>h-*) **'to arrive, to come'**: C 1 Boka *be-dí* [Kr], Tera *ba* [NmT], Gaa *bà-* 'to come' [MN]; 5a Hdi *bəhay* 'to arrive'.

//Cf. Sem Sab *bh<sup>2</sup>* 'entrer, penetrer' [SD: 27].

[JgIb *\*b-* 'come', Coh: 176, Gr: 54, AA I №143, HSED №157].

**3. \*baw/y- 'to grow, germinate'**: W 4 Miya *baw* 'to go out, sprout' [Sch], Paa *mba* 'to go out, germinate' [MS]; 7 DB *bô* 'to grow' [RC]; C 8 Log *bo* 'hervorschiessen, aufwachsen' [LkL], 'to germinate, sprout' [AIL]; 9a Gdr *bày* 'to grow' [FrG].

Deriv.: W 7 Bok *<sup>m</sup>bày* 'gross' [JgR], 'big, large, great' [RC]. Cf. C 7 Zlg *bàba* 'grand'; 10 Dzpw *bá* 'grand'

**4. \*ba(?) - 'to build, create'**: C 5a Lmn *ba* 'to build, erect' [Wff], Hdi *bay* 'constuire, bâtir', Hitk *b-* 'bauen'; 6 Buwal *bā* 'to create'; 7a Skn *ba* 'to build'; 8 cf. Bud *ko-bay* 'to build' [LkBd]; E 1 Kwn *bày* 'to build' [JgIb], Ngam *bày* 'construire (une maison)', Mobu *báyé* 'construire'; 3 Smr *bì* 'to build' [JgIb]. Cf. C 10 Mus *mbu-ra* 'construire la route' [Sch].

Cf. W 3 Bol *báayi* 'building for the servants or slaves of the emir' [IbG]. Cf. [HSED №252].

**5. \*bV<sup>2</sup>(y)- 'to cut, chop'**: C 6 Mbedam *bə* 'to cut' [NdP]; 10 Dzpw *bò<sup>2</sup>ò* 'abattre'; E 1 Kwn *bàyī* 'to cut, chop' [JgIb]; 6 Mok *bóoyé* 'tailler (arbre); se raser'.

Derived nouns: W 7 Monguna *àbây* 'sickle', Mundat *ábáyà* 'machete' [RC]; C 3 cf. FK *mbùà-tà* 'sickle'; 7 Mofu *bebéy* (redupl. < *bVbey* < *bV<sup>2</sup>bV<sup>2</sup>-*) 'faucille (avec un manche en bois)'.

//Berb Shilh *bbi* 'couper, être, déchirer, être', MC *bbey* 'couper, circonciure', Shawiya *bbi* 'couper', TIM *bbi* 'couper, casser' [NZ:

143]. Cf. Sem Geez *nabawa* ‘split’, Amh (*a*)*nābbābā*, Gur *nābba* (from *nbʔ*) [LsG: 384]. Cf. *\*bVHVy/w-* > *bii/buu* ‘to cut, split’

**6. *\*bVʔ-* ‘to pierce, to hole’:** W 3 Bol *b(a)* ‘einrammen, einschlagen’ [LkB], Krkr *baa* ‘to implant (a tying post), to pound in a nail’ [GK]; C 6 Daba *būh* (pl.?) ‘percer’, Buwal *bav* ‘to make a hole’; 8 Log *bāa* ‘durchlöchern’ [LkL], ‘planter, percer’ [AIL], Makari *bo* ‘to pierce’, *bi* ‘to have a hole, être troué’; Kus *bo ho* ‘percer’, *bo sime* ‘percer les oreilles’ [AI], Bud *bīhu*, *biyū* ‘durchbohren, durchlöchern; to pierce, hole’ [LkBd]. Cf. C 2 Mrg *mbù* ‘to sew’ [HfM: 21].

Derived noun: *\*biy-* ‘hole’: C 7 Zlg *biye*, Ould *āvi* ‘trou’; E 5a WDng *bèe* ‘trou en terre’.

Redupl. C *\*bVb-* > *bVv-* > *vVv-* ‘well, hole’: 9a Gdr *vóvu* [Mo: 18].

For C 8 Log ‘planter’ cf. C 5a Lmn *mbébé* (< *mbeʔbe*) ‘planting stick’ [Wff], Hdi *mbibi* ‘wooden tool for planting’.

//Sem Akk *bīʔu* MA, SB, NA (*bību*) MA, NA, pl. *bībū*, *bībānu* ‘drainage, opening (in a wall)’ [CAD b: 297], NSyr *būyā* ‘trou, caverne’ [DRS: 50]. Cf. [HSED №272].

**7. *\*bVyʔ-* ‘to bury, dig’:** 3 Gera *mbū-mí*, Glm *mby-áalà* ‘to bury’ [SchB]; 7 cf. Kul (Richa) *būy* ‘to bury’<sup>21</sup> [JgR], Mundat *būy* ‘to dig’ [RC]; C 8 Log *ba* ‘to dig (a well)’ [LkL].

Derived noun *\*baw/y-* ‘pit’: W 3 Tng *ba* ‘hole, pit, opening’, *ba am* ‘waterhole; hole water’, *ba súndi* ‘anus, hole-dirt’, Bure *bòowó* ‘hole’, Gera *bùwá*, Glm *bò àmá* ‘well’ [SchB]<sup>22</sup>; C 9 Mbara *vwàáyá* (*vw-* < *bw-*) ‘puits’.

Redupl. W 3 Kupto *bàabà* ‘dying pit’; E 6 Mok *báabè* ‘pond’.

//Sem Arab *bwb* (*bāba*) ‘creuser un trou en terre’ [BK I: 176], SCush Irq *baaʔa* ‘pit (square, for hunting or grave)’ [MMQ], Gor *baaʔaa*, Alg, Bur *baʔaa* ‘pit’ [Kies], ECush Oromo *boyii* ‘ditch’ [Grg].

[Cf. HSED №158-9 *\*ba/iʔ-* ‘hole, pit’, *\*ba/uʔ-* ‘to dig, hoe’].

The next root is rather cognate:

**a. *\*(m)bVʔ/w-* ‘to hoe, cultivate’:** W 4 Diri *mbaʔa* ‘to hoe, cultivate’ [SkNB]; 7 Sha *bù* ‘den Boden lockern’ [JgR]; C 2 cf. Bura *buba* ‘to itch, scratch’ [BIB]; 6 Mbedam *émbaw* ‘to cultivate’ [LMb].

//ECush Oromo *boʔo* ‘furrow’ [Grg].

<sup>21</sup> Kulere *buy* is hardly cognate with Fyer, Bok, DB *bur* ‘to bury’.

<sup>22</sup> For W 3 ‘well’ cf. TN №130.

**8. \*bVʷVy-** ‘to blow, to winnow, to dry’: W 3 Krkr *bīyu* ‘to dry up, blow’ [GK], Krf *bii-*, Glm *by-* ‘to dry up’ [SchB], Bol *buyu* ‘to blow’ [GAB], *buy* ‘to winnow’ [LkB, IbG], Ngm *buy-* ‘to winnow (with calabash)’ [IbN]; 5 Zar *vuū* ‘to blow’ [CrZ]; C 4 Gude *buʷu* ‘to winnow grain’; 7 Mada *évè* ‘souffler’; 8 Kus *bo* ‘to blow (of wind)’ [AlK]; E Mawa *boyoy* ‘souffler’, Sok *bóiyó* ‘blasen’ [Luk]; 6 Mok *báàʷá* ‘siffler, souffler’.

For WCh ‘to dry’ see E 5 EDng *bàybiyē* ‘faner’.

Derived nouns: C 5a Lmn *m̀búwá* ‘long wooden flute with 4 holes’; 8 Log *mbáia* ‘Pfeife, pipe’ [LkL].

//Cf. Cush Sid *bubbe* ‘wind’ [KS: 81].

**9. \*bV(ʷ)Vy-** ‘to burn, to boil’: W 3 Kupto *bàabéy* (redupl.) ‘to burn, roast’; 5 Zul *boʷi* ‘to roast’ [Cs №872]; C 2 Klb *bwà* ‘to boil, cook’ [MuK]; 7a Skn *boey* ‘to boil’; E 5 Mig *bìyyò* ‘griller, rôtir’.

Cf. E 3 Smr *bàbà* ‘rôtir’, *bwə* ‘griller’ [JgSib].

Derived noun: W 4 Paa *bubau, bubo* ‘heat (as in fire)’ [MS].

C **\*m-/ʷbVy-** ‘to make fire, to light’: 2 Mrg *mbù* ‘to make (fire)’ [HfM: 30], Bura *mba* [BIB], Chb *mba* ‘to burn’ [HfC]; C 5 Mlg *mba* ‘Feuer anzünden’, 7 Baka *bày* ‘allumer’ [BAS]; 10 Dzpww *bá* ‘allumer’, Mus *boo-ra* ‘illuminer, éclairer’; E 4 Mawa *booyoy* ‘allumer’.

Derive noun. C 1 Tera *bai* ‘fire’ [NmT], cf. Hona *bība-t*, Gbn *bebe*, Boka *bwebwe* ‘hot’ [Kr].

For a possible derived noun cf.: C 10 Dzpww *bàfè*, Dari *bāʷfè* ‘pierre à feu’.

//Eg *nby* (Pyr) ‘brennen’, *nby* ‘Flamme’ [EG II: 244], Cush Sid *bub-* ‘to burn’ [KS: 55].

**10.\*bVʷ/y-** ‘to put down, lie down; throw down’: W 3 Tng *buube* ‘to push down, throw’; C 4 Gude *baa* ‘to lie down, sleep’; 5 Dghw *bayà* ‘to put down’ [Kr]; 7 Baka *bah* (pl. obj.) ‘poser, placer’, *mé-bèhé* ‘to put down’ [BAS], Mofu *báʷ* ‘jeter violemment à terre’; 10 Dzpww *bóʷó* ‘tomber’; E 1 Kera *bàawè* (< *\*baʷaw-*) ‘zu Boden werfen’; 2 Lele *bàá*, Kaba, Nch *-ba* [HmK], Tob *bà* ‘tomber, se poser’, *bè* ‘mettre, poser’ (for *bāgà* ‘mettre, poser’ (pl.?) see №82); 3 Smr *bwà* ‘mettre, verser’ [JgSib].

Deriv.: C 7 Mada *mmbéh* ‘bas, peu élevé’, Muy *mbēx* ‘low’.

//ECush Oromo *buʷa* ‘fall, go down’ [Grg], Tsam *biʷi* ‘fall’ [ATO].

For a metath. cf. ECh *\*<sup>2</sup>Vb(Vw)-* ‘to fall’ [CLD V №3].

**11. \*bVy/w/?- ‘to lose, get lost, spoiled’:** W 2 (redupl.) W 2 Goem *pàap* ‘to get hidden or lost’ (regular devoicing in redupl. forms) [Hlw]; 3 Krkr *bàwu* ‘to get lost, disappear, die’ [GK], Dera *bói* ‘to spoil, to get lost’ [NmK], Kupto *bùyò* ‘to be lost, to suffer’; C 5a Hitk *bíú* ‘nicht vorhanden’; 7 Mada *ábwà* ‘se perdre, mourir’; 9 Mbara *bàa*, Mnj *bi*, Mlw *bi* ‘perdre’; 10 Masa *bà* ‘perdre’ [CC], cf. Azum *bai* ‘without’; E 1 Kera *bì’i* ‘verderben, zerstören’.

//HECush *\*ba<sup>2</sup>-* ‘to be lost, spoil’: Had *bi<sup>2</sup>-*, Gede’o, Kamb, Sid *ba<sup>2</sup>-*, Burji *be-*, *bay-* [Hds]; Som *ba<sup>2</sup>ay* ‘be, become spoiled, be wiped out, destroyed’ [LIS], Bilin *bi* ‘lack’ [RB], Arb *baabi<sup>2</sup>-* ‘disappear’ [Hay], Alaba *ba’-*, Afar *bay-* ‘get lost’, Om Wolt *bay* ‘get lost’, Zaysse, Dawro *bay-* ‘be lost’, Basketo *baa-* ‘be absent’, Gamu *baa-wa* ‘there is not’, Basketo *baa-* ‘be absent’ [LmW: 326], Berb Ahag *aba* ‘ne pas être, être mort’ [NZ: 6].

The next verb may be cognate (a derivative?)

a. *\*mbVy/w/?- ‘to finish’:* W 4 Paa *ba*, Mburku *mbaa*, Kar *mbiy-*, Tsagu *buu* ‘to finish’ [SkNB], Miya *mba*, pl. *mbàhiy* ‘to finish’ [Sch]; C 4 Bch *mbo*, Bata *mbi-t* [Sk], Nzn *bwe’e*, Gudu *mbá<sup>2</sup>à-n* ‘to finish’ [Kr].

Note Hs *báa*, *bàa*, Krkr *bai*, Mol *bay*, Gdr *-ba*, etc., ‘negative particle’ in Chadic and Eg *by*, *bw* Nä ‘Negation’ [EDE II: 177], Dolg: 39 (Cush, Om, Eg, Ch *ba(y)* ‘no’, the same in AA 2 № 146 *\*b8* ‘negation’.

**12. \*bVw/y- ‘to weed, clear (of vegetation), tear off’:** W 7 Sha *<sup>m</sup>bù* ‘jäten’ [JgR]; C 7 Mofu *-buw-* ‘effeuiller, ébrancher, cueillir’, Muy *ábày* ‘to clear out, clear smth of vegetation’. Cf. E 1 Mobu *bé*, Ngam *bèe*; 3 Smr *bàyyà* ‘enlever’ [JgSib].

a. *\*bi<sup>2</sup>(Vy)- > fi ‘to tear off’:* 8 Log *mbo-wun* ‘to pick, pluck (fruit)’ [AIL], Kus *bia* ‘pick, pluck (fruit)’ [AIK]; 9 Mbara *bì* ‘déchirer’; 10 Dzpw *bé* ‘cueillir; décocher, déblayer’, Dari *bīē* ‘cueillir’.

//SCush rift Irq *buu<sup>2</sup>* ‘to harvest, reap’ [MMQ], Irq, Alg *bu<sup>2</sup>-* ‘to harvest’ [Eh: 141], Berb Nef *ebbi* ‘ramasser, cueillir, récolter’, Mzab *bbi* ‘prendre et emporter, cueillir’ [NZ: 143f].

The following root may be cognate (pl. in *-h-?*):

a. C *\*bah(w)- ‘to pull, tear’:* 3 Bana *mbàxà* ‘tirer, trainer, arracher brusquement’ = FG *mbàxùy-ti* ‘to pull’ [Kr]; 6 Mina *boh-* ‘to tear out’; 7 Ould *bàh<sup>w</sup>* idf. ‘action de déchirer qqch’.



Denominal verb **\*bVy/w-** ‘to sprinkle, pour (water), to weep’: W 3 Bol *bàayu* ‘to sprinkle (water with mouth, hand)’ [GAB]; W 4 Siri *biyi*, Kar *biy* ‘to weep’ [SkNB], cf. Wrj *wuwə-* (possibly, assim. < *buwə* < *\*bwy*); C 2 Bura *biuu* (idf.) ‘sound of water as poured on ground’ [Ann]; 7 Mafa *buw-* ‘verser (liquide)’; E 2 Lele *bòy* ‘verser, couler’; 3 Smr *bwà* [JgSb] ‘verser’; 4 Barein (dial.) *bii*, *bii* ‘to draw (water)’.

Note C 7 Mol *bah* ‘to pour’ (pl. in *-h-* ?) [FsM].

Cf. C 7 Mada *évvè* (< *ebwe*) ‘bruine, pluie légère qui dure’.

//Cf. Sem Akk *abbu* ‘washout caused by river’ SB [CAD a<sub>1</sub>: 47], SCush Dah, Alg *bu*<sup>?</sup> ‘to pour’ [Eh: 142], Oromo *booya* [Grg] ‘to weep’.

Redupl. C 7 Muy *ábábā* ‘to pour water out’, Chuv *mévèvèy* ‘couler’; E 5a EDng *bóobé* ‘transvaser, verser avec la jarre sur l’épaule’, Mig *bóobó* ‘vider l'eau d'une grand jarre où d'une bouteille’.

The following forms may be cognate:

**\*bV<sup>?</sup>Vy-** ‘to wash’: W 3 Krf *bi<sup>?</sup>y-* [Stl], Bure *bi<sup>?</sup>* ‘to wash’, Kupto *m-bù<sup>?</sup>yéy* ‘to rinse the mouth’; 6 Ngz *vìyú* ‘to wash’.

Cf. [CED №15].

**15. \*ba<sup>?</sup>y-** (possibly, < *\*ba<sup>?</sup>Vy-*) ‘back’: W 1 Hs *báayáa*; 3 Bol *boy*, Krf *biibi*, Krkr *bái*, Ngm *bèy*, Maka *boy*, Glm *bi*, Dera *bii*, Tng *pìi* [JgIb, SchB], Kupto *fii*, Bure *biibè* ‘back’ (cf. Dera *bii šóowí*, Ngm *bèi ró*, Bol *boi rewe* ‘bark of tree’, i.e. ‘back of a tree’ [GAB]), Maka *bóyí* ‘behind’; 7 DB *bi* [JgR], *fi*, Bok *tákfay* ‘behind’ [RC]; C 4 Gude *ba<sup>?</sup>á*, Nzan *bii*, Bch *be-to*, Bata *be-tiye* [JgIb], Gudu *bia* [Meek]; 7 Mafa *báaba*, *ba* ‘back’; E Kwn *tàwá* [JgIb] (possibly < *\*ta-ba*, cf. Kaba *tàbà*, Kwn *tòw* ‘sun’ [JgIb] < *\*ta-<sup>?</sup>ab-* < Ch *\*<sup>?</sup>ab-* ‘sun’ [CLD V №4]). Deriv.: E 1 Kera *bây* ‘auf den Rücken liegend’, W 3 Ngm *bèbèy* ‘backwards’ [NEH].

a. C 10 **\*bV<sup>?</sup>y-** ‘bosse’: Dzpw *bù<sup>?</sup>* ‘bosse’, Gizey, Masa *biyàw*, Ham *bèw* ‘bosse d'un boeuf’ [LexC].

[JgIb *\*b-y* ‘back’, cf. HSED №251].

//Cush agaw Hamir *baw-* ‘carry on the back’ [ApAg], SCush rift *\*<sup>?</sup>ubaab* ‘to carry a child on the back’ [Kies], Berb *\*bVbb*: Qab *bibb* ‘porter sur la dos; se charger d’un fardeau’, Ahag *bubbu*, Shenwa *abba* ‘to carry (a child) on one's back’, etc., Ghad *ebb* ‘to (trans)porter’ [NZ: 5f]. Note: W 3 Maka *bàmbáayò* [SvP], Kupto *bàmbbéy* ‘to carry on the back (esp. a child); to support (a child)’ (< Berb?),

**16. \*baw/?- (\*ba<sup>2</sup>Vw-)** ‘upper arm’ > ‘wing’: W 3 Dera *búwà* ‘arm, lower arm’<sup>24</sup> [NmK], Bol *mbàa* ‘upper arm, wing, branch of tree’ [GAB], Ngm *mbàá* ‘(upper) arm’ [NEH] (*m-* may function as a body-part prefix); 5 Grnt *bau* ‘wing’ [Cs]; C 4 Gude *bù-bù’wá* ‘wing’; C 9a Gdr *vo* (< \**bwa*) ‘bras’ [Mo: 31]; E 2 Lele *bāwā* ‘aile, epaule’, Tob *kō-bā* ‘main’; 6 Mok *béy* ‘arm, hand, front leg’.

C 7 Mwl *bibi* ‘wing’ and 8 Bud *biibi* ‘Oberarm’, rather < Kanuri *bibi*.

//Cf. Cush Beja *biy*, *buuy* ‘Glieder’ [RBd], Oromo *bu’aa* ‘limb’ [Grg].

Redupl. \***ba-ba** ‘shoulder(s)’: W 2 Kofyar *bàb* ‘shoulders, horizontal part’ (apud [TAS:11]); C 8 Makari *baba* ‘shoulder blade’ [AIM].

For a possible derivative cf. C 10 ‘chauve-souris’: Dari *bābāy*, Gizey, Ham *bàybáy*, Masa *bàybày*, Musey *pàpày*, Lew *’àbèbèy*, Marba *’àbìbèy* [LezC].

//Eg *bb.wj* ‘die Schlüsselbeine (claviculae)’ Med [EG I: 455]. For Eg-C 8 Bud ‘shoulder’ see [AA 2 №138], for Eg-Kfy see [TN: 2].

**17. \*baw/y-** ‘man’: C 8 Bud *bi* ‘männlich’ [LkBd]; 10 Dari *bày* ‘ami’, Masa *ba* ‘frère’ [Mo: 49]; E 1 Kera *àbày* ‘jeune homme’; 2 Lele *bā*, pl. *ba-ngnwe* ‘homme’, Kaba *ba* ‘man’ [JgIb], Nch *ba* ‘homme’ [HmK]; 3 Smr *’àbé* ‘man’ [JgIb], 4 Sok *boo* ‘Mensch, jemand’ [Luk], Mawa *bo* ‘homme, être humain’, Ubi *bò* ‘personne’ [Alio].

a. W 3 \***biy-** ‘people’: Ngm *biyà* (pl. of *ngò*) ‘people’ [NEH], Bol *biya* ‘people, people of...’ [GAB]. Cf. [TN №№143, 383].

Cf. C \***ba** ‘body’ > *na-ba* > *nava* > *va* ‘(my) body’/ *ya-ba* > *ya-va* > *va-ya* ‘your body’: 1 Tera *va* [NmT]; 3 FK *và*, Bana *vya*; 5-5a Lmn *γàvà*, Wnd *wvà*, Glv *vəyá* Dghw *ýgà* [JgIb], Hdi *vəya* ‘body’ (*ya* ‘you’), Pod *na-va*, Mlg *vúwe*; 7 Zlg *bá*, Mui *vú*, Mafa *vá*, Mofu *vòw*, Ould *vò*, *slu vo* (*slu* ‘meat’), 7a Skn *və-d*.

**18. \*baw/y-k/t-** (also \***k-bVy-**) ‘mouth, opening’ (with a body-part suff.): W 1 Hs *bàà-kii* ‘mouth, opening, entrance’; 2 \***k-paw-k** < *k-baw-k*: Mghv *pòo* ‘mouth, opening, word’ [BlM], Mnt *ka-pur*, Grk *pa-k* ‘mouth’ [Fp], Mpn *pùò* ‘mouth, word, language’, Chip *pwò* [JgC], Mush *poo* [JgO] ‘mouth’, Tal *kà-phūu-x* ‘mouth’ [JgIb], Goem *pwà* ‘mouth (of a human or animal), beak, opening’ [Hlw], Ngas *p(w)ò* ‘mouth, entrance, rim’ [JgN]; 3 Krf, Glm *bù*, Grm *bùú* [SchB], Dera *bò-k*, Maka *boho* [NmM], *bòkò* [SvP], Bure *bùyé* ‘mouth’, Ngm *bòo*

<sup>24</sup> For an alternative etymology for Dera and Mokilko see [TN №152].

‘mouth, language, opening’ [NEH], Bol *bòò* ‘mouth, opening’ [GAB], Krkr *bòò* ‘mouth, opening, language, edge’ [GK], Tng *pɔ-, pɔk* ‘mouth, opening, door; edge, frontside’, Kupto *fó-hó* ‘mouth, language; entry’; 5 Bogh *pyok*, Mng *pik, piyək*, Grnt *byau*, Jimi *bii*, Tala *pii, kaa-bi* ‘mouth’ [Cs], Zaar *vii* ‘mouth, edge, language’ [CrZ], Guus *vii* ‘mouth, language’ (probably, < *ka-bii*, cf. Tala), Buli, Dott, Geji, Zul *bii* [Cs №76], Dyarim *bi*; E 2 Lele *ku-b*, Nch *kwo-bə* ‘mouth’ [HmK]; 3 Smr *bī* [Jg], *bu-m* ‘dein Mund’ [Luk], Tum *bə-g*; 4 Sok *bó-t-um* ‘dein Mund’ [Luk], Mawa *bu-t-um*, Ubi *būu-r-um* [HuJ]; 5 Mabire *be-to* [HuJ], Mig *bii*, Bid *bii-te* ‘bouche, lèvres, paroles’, WDng *bii, bi*, EDng *bii* ‘la bouche, l’ouverture, la fenêtre’; 6 Mok *bí-zé* ‘bouche, bec, lèvres’; 7 Tor *be, bi, bi-tù* ‘ma bouche’ (for *-um-* in body-parts cf. E 1 Kwn *ke-les-um* ‘(my) tongue’ [Luk], etc.).

Originally ‘a hole’? Cf. №6. **\*bVʔ-** ‘to pierce, to hole’.

//Cf. Berb Mzab *baha*, Wrgl *beḥḥa* ‘bouche’ [NZ: 42].

[JgIb *\*bk*, GrL: 298 (Hs, ngas, Bol)].

**19. \*bay ‘leaf’:** W 3 Tng *bayɔ* ‘leaf (for soup)’; C 4 Jimj *bá-n*, Gude, Sharwa *bá*, Tsuvan *ábá* [BryJ], FM *ba* [Kr]; 5a Lmn *baya*, pl. *báyhá* [Wff], Hitk *báyá*; 7 Mafa *váh* ‘feuille (d’arbre)’; 7a Skn *v<sup>w</sup>ax* ‘leaf, fibre’ (pl. in *-h-*, regressive assim. < *\*bah-*).

//Cush Beja *báya* ‘Baumblatt’ [RBd], Had *buyya* ‘leaf’ [Hds].

For Tng, Gude, FM, Hitk see TN №325 ‘leaf, sprout, flower’. For Ch ‘to bloom; flower’ see №24.

**20. \*bVʔw- ‘milk’:** W 3 Dera *biyá* ‘milk’ [NmK]; E **\*bVw-** ‘milk’ (coll.)<sup>25</sup>: 1 Ndam *but* (*bu-t-*); 5a Mabire *bo* [JnH], EDng *būwà*, Bid *būwa* coll., Mig *bó* pl., 5b Jegu *bu*, Mubi *bè* coll. [JgM].

The next root is cognate (cf. ‘white as milk’).

**a. \*biʔw/y- ‘white’:** ; 4 Diri *bee* ‘white’ [SkNB]; C 3 HB *biya* ‘white’ [Kr]; 5a Lmn *bìwà* [Wff], Hitk *bìwà* ‘weiss’; 10 Dzpw *bú* ‘white’.

Deriv. in *m-*: C 5 Zaar *mbaa* ‘to be white, shine’ [CrZ]; 7 Mofu *mbéʔ, mbéʔù* ‘blanc comme du lait’. Cf. [TN №120].

**21. \*bVʔVw- ‘kind of antelope’:** W 3 Krf *bòʔò*, Glm *bùbà*, Gera *bòbò* (compensatory redupl.) ‘duiker’ [SchB], Krkr *bàwi* [GK], Ngm *bòʔi* ‘bush duiker’ [NEH], Dera *bwò* ‘duiker’ [NmK], Tng *bobo* ‘gazelle’;

<sup>25</sup> Accord. to [TN №114], is cognate with Berb *\*b[h]* ‘breast’.

10 Daeri *mba* ‘antelope-cheval’; E 2 Lele *bō* ‘Cobe des roseaux, redunca’.

Note W 2 *\*pwap* < *bwap*, regular devoicing (redupl. or *-p* pl.): Grk *pwup*, Mnt, Goem *pap* [Fp], Chip *pap* [Kr], Mghv *pàap* ‘duiker’ [BIM], Ngas *peep* ‘oribi’ [Fl], Mpn *páap* ‘antelope’; 7 (irregular initial) Fyer *faf* ‘antelope’ (gen.), Bok *fafi*, Karfa *fife*, Monguna *tara-fyáw*, Sha *ma-viyú* ‘gazelle’ (gen.) [RC].

/SCush Qwadza *ba<sup>2</sup>-uko* ‘bush-duiker’ [Eh: 135].

Cf. SED II №54 *\*bVb(b)-* ‘a wild hoofed animal’, with more Cush cognates. Both Semitic forms presented in SED seem not quite reliable: a. an isolated EthioSem Tigre *buuba* ‘kudu-antelope’ looks like a loan; b. Akk *bibbu* ‘wild sheep’ (note a semantic gap) can be found in a restricted number of literary texts.

a. Cf. C 5 Glv *bux-ta* ‘antelope’, Lmn *bah-ta* ‘redbuck’ [Wff] and Cush Beja *báha* ‘dwarf goat, type of antelope’ [RBd].

**22. *\*bay/w-* ‘rope, thread’:** W 3 Kupto *àbàawá* ‘thread’, Kupto *bii* ‘thread (esp., for weaving clothes)’; E 4 Smr *báia* ‘Zaum, Zügel, bridle’ [Luk]; 5 Bid *bàayo* ‘trap made of ropes’.

//Eg *ybbw* ‘Art Seile am Schiff, cable’ [EG I: 63].

The following isoglosses may be cognate: a. C 5 Pod *baa* ‘to weave’, derived noun: W 2 Goem *bòp* ‘woven basket with a narrow opening’

b. Denom. verb in *m-* ‘to (un)tie’: W 3 Krf *mbè<sup>22</sup>éy*, Glm *mby-áalà* ‘to untie’; C 2 ‘to tie’: MrgC, Klb *mbà*, Wmd *mbaw*, Chb *mbwəy* [Kr], Mrg *mbàa* [HfM: 30].

**23. W *\*bVy-* ‘place’:** 2 Grk *pye* [BIY], Mpn *pēe*, Chip *pi*, Goem *bi*, Mnt *be* [Fp], Ngas *pii* [Fl, JgN], Goem *pè* [Hlw], Mghw *pee* [BIM], Mush *pee* [JgO], 3 Bol *bèyi* ‘place, a place where smth is located’ [GAB], Krkr *bii* [GK], Dera *bói* [NmK], Ngm *bè<sup>23</sup>i*, Gera *bi* [SchV] ‘place’.

Cf. W ‘hut’: 5 Geji *bii* ‘hut’ [JgIb] (if not < Ch *\*bin-* id.); 7 Sha *buy* ‘kleine Ritualhütte’ [JgR].

Derived noun in *m-*: C *\*mbaw-* ‘hut, place’: C 2 Wmd, WM, Mrg *mbwa* ‘hut’ [Kr]; Bura *mbwa* ‘home, house’ [BIB], Chb *mbwa* ‘Zimmer, Raum’ [HfC], Klb *mbwà* ‘area’ [MuK]; 3 FK *mbwi* ‘palace’; 8 Log *mba* ‘place’ [ALL]. Cf. [TN №309].

//Eg *bw* ‘place’ (*bj.t* ‘Ort, Stelle’, siehe bei *bw*) [EG I: 450], ECush

\**biy-* ‘place, earth’: Hadiya *bey-o*, dull *piy-e* ‘place’, Oromo *biyy-a*, Konso *pīi-ta* (singulative), Arb, Das *bii*, Elmolo *bi-* ‘earth’ [Ss: 45], HEC \**bay(-ččo)* ‘place’: Kamb *bee-čču*, Sid *bay-ččo*, Had *beeyyo* [Hds], Arb *biyy* ‘land, earth, field’ [Hay], Oromo *biyyee* ‘soil, country’, *biyya* ‘land, country’, *biyyoo* ‘earth’ (> Ong *biya*) [Grg]. Cf. Sem Arab *bwy* ‘s’arreter, faire halte dans un endroit’ [BK I: 181]. Note also Om Shin *bey-* ‘sitzen, wohnen’, *beyokka* ‘Platz, Sitz’ [LmSh].

The next isogloss is probably cognate. For similar semantic linkings see, eg., W 3 Kupto *fīdī* ‘place, field’ and ECush \**bVy-* ‘place, earth, field’.

a. \**bay/w-* ‘field’: C 4 Bata *bóy-ti* ‘fields, farm’ [JgIb]; E 4 Barein (dial.) *bàyá*, *bāyá* ‘field’; 7 Brg *bòwà* ‘field’ [JgIb].

For ngas-Eg-LECush see [GrL: 301], cf. also: Dolg: 38, AA 2 №137, HSED №244, EDE II: 172.

24. \**bVy/w-* ‘flower’: C 7 Muy *vàyváy* (\**baybay* > *bayvay* > *vayvay*); 9 Mbara *vùvày*; E 2 Kaba, Nch *bī* [HmK]; 5a WDng *bóoyé*; 5a Ubi *bòyi-n*, Bid *bòoyò*, EDng *bōoyō*; 6 Mok *bóbbò*.

a. \**mbVb-* ‘flower’: C 8 Lgw *mbuwa* (< *mbuba*), Kus *bwa* [Al].

//Cush Afar *ambáb*, Saho id, Bil *ambab* ‘Blume, Blüte’ [RA].

Denom. verb in \**a-*: \**abVw/y-* > > *δVw-/\*bVwVy-* ‘to bloom’: C 10 Gizey, Ham, Lew, Musey, Marba, Masa *ḥó* ‘fleurir’ [LexC], Musey *ḥora* (*ḥo-ra*) [ShyM]; E 5 VVw-y-: Bid *booy*, Mig *bòoyò*, EDng *bóoyé*, WDng *bóoyè* ‘fleurir’.

//Cf. Berb Ahag *buyi* ‘produire des boutons qui donneront fleurs et fruits’ [NZ: 142].

25. C \**bV* ‘beautiful, good’ > *mbV* ‘to be good’: 7 Mofu *-mb’* ‘être beau, plaire’; 8 Kus *bu* ‘beautiful, good’, Log *bi* ‘good, kind’ [AIL]. Cf. W 3 Bure *bó’ó* ‘sweetness’.

//Sem Arab *bhy/w* ‘être beau, joli; briller’ [BK I: 174], SCush Alg *bo’* ‘better, superior’, *bo’ot* ‘beautiful’ [Eh: 139].

For CCh 7a Skn *ḥoe* ‘beautiful, good’; 10 Dari *ḥāy* ‘bien, joli, beau’, Dzpw *ḥāi* ‘bien, bon’ cf. Sem Arab *’abha-t-* ‘splendeur; beauté’ (?bh) [BK I: 6].

26. \**bud-* (< \**bud-*, disssim. of two voiced plosives) ‘to hoe, cultivate’: C 4 Gude *budā* ‘to clear and farm new ground; hoe deeply

in hard ground’, cf. *buhədə* ‘to dig up, dig out’; 5 Lmn *buda* ‘hoeing, doing woman’s farm work’; 7 Mofu *-bábəd-* ‘labourer (en fin de saison des pluies), houer’; E 1 Mobu *bábážé* ‘défricher’.

Derived nouns in *m-*: W 3 Krkr *mbùudāa* ‘communal labour’ [GK]; C 5a Hdi *mbudū* ‘second cultivation, the soil is turned over’.

Derived noun in *ʔa-* ‘cultivated field’: *\*ʔabVd-* > W 5 Zaar *vùdî* ‘field cultivated by the grand-father’ [CrZ]; C 7 Muy *vàdàŋ* ‘cultivated field’.

//Sem Aram *bādīd* ‘bêche; tranchée, sillon’ [DRS: 44], Cush Beja *báado* ‘die Furche, Ackerfurche’, Nubian *badd* ‘graben, pflügen’ [RBd], Berb Figig *badu* ‘sillon’ [NZ: 17].

**27. *\*bVd-* ‘to strike, kick, butt’:** W 3 Krkr *bàdaa* ‘to kick’ [GK], Ngm *bidā* ‘to kick (with foot)’ [NEH], *bid-* ‘to step on an insect’ [JbN]; 6 Bade *àvdu* ‘collide, hit, bang into, butt with head’; E 1 Mobu *bádé* sg. ‘frapper, taper’.

a. E 5a *\*bad(d)-* (< *\*badH-*) ‘to collide’: E 5 Mig *bàdǎò*, Bid *bàdāk* ‘(se) heurter’.

//Sem Arab *bdh* ‘frapper qqn (avec un bâton)’ [BK I: 95], cf. Amh *bādābbādā* ‘frapper’ [DRS: 44].

**28. *\*(bV)-bVd-* ‘to pour’:** W 4 Wrj *bá-bád* [SkNB], Paa *bú-budūu* [MS] (compensatory redupl.) ‘to pour out’; C 7 Mafa *bad-* ‘verser (un liquid)’.

Deriv. C 7 Mafa *budok<sup>w-</sup>*, *buzok<sup>w-</sup>* ‘transvaser’, Mofu *-bádāngw-* ‘vider, verser, couler’.

a. Deriv. C *\*m-bVd-* ‘to pour (out, on)’: C 1 Tera *mbádī* ‘to pour out’ [NmT]; 5 Lmn *mbəda* ‘to pour’ [Wff].

Derived noun: C 7 Chuv *mébèdēf* ‘fontanelle’. Dissim. of two voiced plosives.

b. *\*bVd-* > *bVd-* ‘to wash’: W 3 Tng *budε* ‘to steep, soak’, Krkr *bīdū* ‘to wash, bathe’, Gera *būdā-mì*, Glm *báry-àalá* ‘to wash’ [SchB]; E 1 Kera *bàadá* ‘waschen’, cf. Mobu *bážé*, pl. *pážé* ‘laver qqch’; 3 Smr *bádá* ‘barboter’ [JgSib].

//Cf. Om Kafa *bad* ‘untergehen im Wasser, versinken’ [RK].

**29. *\*bVd(d)-* ‘to untie, to separate’:** W 3 Bol *bīdaa* [GAB], Ngm *badā*, *bidā* ‘to untie’ [NEH], Krkr *bādāa* ‘to separate, untie’ [GK]; 4

Paa *mbidāa* ‘to release, untie’ [MS]; C 9 Mlw *bidi* ‘détacher’.  
Dissim. of two voiced plosives or *-dd-* > *-d-*.

//Sem Arab *bdd* ‘séparer; éloigner, renvoyer qqn, repousser’, Hbr *bōdēd* ‘séparé’ [BK I: 92, KB: 108, DRS: 44], Cush Sid *bad-* ‘to separate’ [KS: 312].

For Sem-Cush see [AA 2 №79].

**30. \*bVd- > bVd/-** (dissim. of two voiced plosives) ‘to rot, decay’: W 3 Tng *bude* pl. *bupte* ‘to decay, rot’; 4 Paa, Diri *budú* ‘to decay, rot’ [SkNB]; C 7 Ould *-mbàdāy* ‘s’abîmer, gater, faire d’adultère, fornication’; 10 Azum *budā* ‘decay, rotten, bad’; E 7 Mubi *bèedēw* ‘devenir mauvais’ [JgM].

Deriv. W 3 Pero *bùránì* (< \**bud-ni*) ‘putrid’.

//ECush Oromo *bada* ‘to spoil’ [Grg], cf. Sem Arab *nbd* ‘être usé, râpé (se dit des habits)’ [BK II: 1475].

**31. \*bVd- > bVd/d-** ‘to open’ (dissim. of plosives) : W 1 Hs *búudā* ‘to open slightly; uncover and expose to view for a short time’, *búudē* ‘to open, remove’; 2 Ngas *bat, bet* [Fl], *bét* [JgN] ‘to open’; 5 Grnt *bādi* ‘to open, opening’ [Hr]; C 2 Klb *mbādiyā* ‘to open’ [MuK].

Derived noun: W 1 Hs *má-buudii* ‘key’.

//Cush Saho, Afar *bod* ‘to open’ [RA].

**32. \*bVd- > bVd/-** (dissim. of two plosives) ‘to close, cover’: W 6 Duw *bàdo*, plac. *bàbàdo* ‘to close’; C 7 Mada *ávād* ‘couvrir’; E 1 Mobu *bódé* ‘couvrir’, pl. *podde*, Ndam *bèdi* ‘incuber, couvrir (des oeufs), fermer’.

a. **\*bVd/d-** ‘to hide (o.s.)’: C 5 Mlg *báda* ‘sich verstecken’; E 3 Smr *bwādā* ‘cacher’ [JgSb]; 5b Mubi *būidī* ‘se cacher’ [JgM].

Deriv. in *m-*: C 2 Klb *mbùdá* ‘to hide’ [MuK].

Note C 4 Gude *bádàrá* ‘food eaten in secret to avoid sharing’.

**33. \*bVd- > bVd/-** ‘to speak’: W 3 Dera *bídē* ‘to ask’ [NmK]; 6 Duw *àbdo*, WBade *àbdu* ‘to ask’; C 5 Wnd *báda* ‘to chatter’ [FW], Pod *mbáda* ‘parler’; 7 Mada *ámvádá* ‘parler, dire’, Mbuko *mbéda* ‘répondre’. Dissim. of two voiced plosives.

//Cf. Sem Phn *bd* pl. ‘iddle talk’ [HJ: 144], Cush Dah *ʔibed* ‘to tell’ [TsD].

**34. E \*bVd- ‘to seize’:** 1 Mobu *baade* ‘saisir’; 5b Mubi *bùudí* ‘tenir, serrer, attraper, saisir’ [JgM].

The following isoglosses stem from the same Ch root.

a. W **\*bVd- ‘to glean’:** W 3 Krkr *bùudu* ‘to glean’ [GK], Ngm *bùudô* ‘gleaning’ [NEH]; 6 GBade *bādū* ‘gleaning’.

b. Deriv. in *m-* ‘to pluck, pick’: C 4 Gude *mbudā* ‘to pull, pluck out’; 5 Pod *mbáda* ‘to gather, pick (pl. obj.)’. Dissim. of two plosives.

**35. E 3 \*bad- ‘to turn’:** Tum *bàad* ‘se retourner’, Smr *bádá* ‘voir en se tournant’ [JgSib].

C deriv. in *m-*: **\*mbad- ‘to turn, (ex)change’:** C 5 Lmn *mbāda* ‘to change, turn, replace’, Pod *mbáda* ‘changer, échanger’, Hdi *mbāday* ‘to transform, to turn’, Mlg *mbáda* ‘ändern, austauschen, (ex)change’; 7 Mbuko *bə-mbad* ‘échanger’, Mol *mbad* ‘to turn, change’ [FsM], Mada *ámbedā* ‘changer, affranchir, payer une rançon’, Mbuko *mbéda* ‘renverser, transformer’, Mofu *mbād-* ‘(se) tourner, retourner; changer, (se) transformer, échanger; répondre, traduire’, Ould *-mbād* ‘tourner, faire la commerce, remplacer’; 9 Mbara *mbūd* ‘devenir, rendre’.

Deriv. in *-k-*: W 6 GBade *bādā-ku* ‘translate, speak foreign language’; C 7 Ould *mbādā-kà* ‘retourner’.

The following isogloss seems cognate:

W 3 **\*bVd- > bVd-** (dissim.) **‘to wind, roll’:** W 3 Bol *biidiyu* ‘to wind rope round and round’ [GAB], ‘auseinanderfalten’ [LkB], Maka *bèed-* ‘to fold’ [SvP], Ngm *bòodā* ‘to roll up, coil up’ [NEH].

CCh *\*mbida* ‘to change’ [GrR].

**36. \*(?a)bVd- > \*vad- ‘to fabricate’:** W 4 Wrj *vaad* ‘fabricate’ [BIS]; C 7 Ould *-vād* ‘fabriquer, forger’ Chuv *mévdēy* ‘forger, couvrir le toit de la case’, Mada *ávād* ‘forger’, Muy *ávād* ‘to roof, to forge’, Mafa *vid-* ‘forger, fabriquer; faire un toit en paille’.

//Sem Arab *bd<sup>ʕ</sup>* ‘produire qqch de nouveau, inventer, commencer’, IV-stem - *ʔbd<sup>ʕ</sup>* ‘inventer, produire pour la première fois; faire, inventer, forger (un conte)’ [BK I: 96].

A loan from Arabic can not be excluded.

**37. \*(m)bVd- ‘to blow’:** C 2 Klb *mbādā* ‘to blow’ [MuK], Mrg *mbidū* ‘to blow’ [JgIb]; 7a Skn *vud* ‘to blow into smth’; E 5a EDng *bóodé*

‘souffler, activer le feu’. Secondary *-d-* by dissim. of two voiced plosives. Accord. to [TN № 14], CCh follows AA *\*bʔ* ‘hot wind’.  
 Derived noun: C 4 FM *mbudú*, FB *mbudín* [Kr], Jimj *mbidǎn*, Gude *máďǎ* ‘wind’ [BrJ].  
 //ECush Som *biday* ‘to be blown away’, *babbad* ‘wind gust’ [LIS].

**38. C *\*mbVd-* < *\*bVdVH-* ‘to go, walk, come’:** 1 Boka *bìďèďi* ‘to go’ [Kr]; 2 Klb *mbudiyà* ‘to return’ [MuK]; 5 Vemgo, Gvoko *mbada* [HmG], Hdi *mbaday* ‘to walk’; 10 Azum *mbadā* ‘to come’  
 //Cf. Sem Arab *bdʔ* IV ‘sortir; venir’ [BK I: 94].

**39. *\*bVHVd-* > *bVd-*/*\*bVd-* ‘to leave, to escape, go away’:** 2 Mrg *mbəďu* ‘to escape’; 7 Mofu *-bəd-* ‘laisser la place’; 8 Kus *bada* ‘to abandon’; E 2 Lele *bəďi* ‘go to meet smb.’; 3 Tum *bəd* ‘sortir’.  
 //Sem Arab *baʕida*, *baʕuda* ‘s’ éloigner’, Aram Syr *ʔabʕed*, Sab *bʕd* ‘éloigner’ [DRS: 73], for more Sem cognates see [Bel 1 №31].  
 Cf. Arab *bʕd* ‘être éloigner, être absent; périr, mourir’ [BK I: 141] and C 10 Azum *badā* ‘to cease, to be irrevocably lost’, *bodā* ‘deaths’ (pl.).

**40. *\*bad(VH)-* > *bad-* or *\*bVd-* > *bad-* (dissim. of two plosives): ‘to fall’:** W 3 Gera *bəďə-mi* ‘to fall’ [SchV]; C 5 Wnd *bəďa* ‘to fall’ [JgIb].  
 Deriv. C 7 Mofu *-bəd-t-* ‘terrasser, jeter avec force, cogner, assommer’.  
 Reflexive *\*mbad-* ‘to collapse, ruin’ (intr.): 5 Pod *mbəďa* ‘s’écrouler, faire tomber, collapse, fall’, Mlg *mbəďa* ‘fallen, sterben’; 7 Muy *áməďəď* ‘to collapse’, Mada *áməďəď* ‘se démolir, s’écrouler’, Mafa *mbəd-* ‘renverser, démolir’, Ould *-mbəd* ‘s’écrouler, tourner’.  
 //Cf. Sem Arab *bdħ* ‘jeter, lancer’ [BK I: 94]. Semantically not very convincing (but cf. Mofu).

**41. *\*bad-* > *bad-* ‘thigh’:** W 4 Miya *mbəďə* ‘thigh’ [Sch]; C 7 Mada *óbbód* ‘cuissot, gigot (d’animal)’, Merey *bəďə-zay* ‘fesse’. Dissim. of two voiced plosives.  
 //Sem Eth Harari *bəďu* ‘croupe (d’un animal)’ [DRS: 45], ECush Som *bawdo* ‘thigh’ [LIS].

**42. *\*bid-* (< *-bid-* ?) ‘(red/patas) monkey’:** W 1 Hs *biri*; 2 Mnt, Goem *pid* ‘monkey’ [Fp], Goem *pít* ‘small red monkey’ [Hlw], Mnt *pít*

[JgC], Mghv *pìt*, Grk *pət* [JgIb], Chip *pit* [Kr], Mushere *dàa-pìt* [JgO], Mpn *pìt* ‘monkey’; 3 Gera *bidì*, Glm *bìiryà*, Grm *bùdà*, Bele *bìdò*, Krf *bìrò* [SchB], Krkr *bùdò*, Grm *budda* [JgIb] ‘monkey’, Ngm Bol, Krkr *bìdò* ‘monkey, esp. patas monkey’ [NEH, GAB, GK], Tng *pid-ok*, Bure *bìdò*, Kupto *fídó* ‘monkey’ gen.; 4 Paa *vuda-čiki*, Jmb *vidi*, Kar *viti-zəha*, Siri *víyí* [JgIb]; 5 Mngs *brri* [Cs], Grnt *bèedàu* [Hr], Geji *bəli*, Buli *bārè*, Zaar *vùrì* [JgIb], Guus *vùrì* [CrG], Dyarim *bùrì*; 6 Ngz *və̀zì*, WBade *ə̀vžā-n* ‘monkey, esp. patas monkey’, Duw *ə̀vžì* (-*žì* < \*-*dì*), pl. *ə̀vžə̀žìd* ‘monkey’ (cf. *ə̀vžì*, pl. *ə̀vžìd* ‘Bade people’); 7 cf. Fyer *fìir* [JgR]; C 1 Tera *vidì*, pl. *vité* [NmT]; 5-5a Mlg *və̀ré*, Wnd *vre*, Chn *vdí* [JgIb], Pod *ude*; Gdf *vì<sup>h</sup>ə̀-đàga* [JgIb], Lmn *və̀zì* [Wff], Hdi *və̀zi* Hitk *və̀zì* (-*zì* < \*-*dì*); 7 Zlg *bìrè* ‘singe rouge’, Muy *vri* ‘patas monkey’, Gis *vre* [JgIb], Ould *və̀ry* ‘monkey’; 9a Gdr *briá* [JgIb], *biryá* [Mo]; 9 Mnj *avri-yongo*, Mbara *frè*; 10 Masa *viira*, Dzpv *vir* [JgIb], Azum *virá*, Musey *viina* (< \**vir-na*); Masa, Musey *viirá*, Marba *vira*, Peve *vīr*, Hedè, Zime *vir* ‘monkey’ [Shy]. Irregular reflexes of the initial (esp. -*f*- in Fyer and Mbara) may be provoked by a pref. (a noun-class marker).

//Berb Ahag *abiddaw*, Ghad *biddu* ‘singe’ < Chad W 3 [NZ: 24] [NM \**b-r/d-*, JgIb \**bd*, GrL: 298 (Hs, ngas, Bol), ISv \**b-r-y*, HSED №281].

Note W 4 Wrj *batuwa-na* [Sk], E 2 Lele *bòdū* ‘monkey’, E 5b Kaj *àboodan* ‘singe’ < \**abawVt-/abawVw-*.

**43. \**bVd-* > *t-/k-bVd-* ‘night’:** 2 Grk *pwót* ‘night’, *mər pwót* ‘midnight’ [BIY]; 3 Krf *búdí*, Gera *bírbi*, Glm *bə̀ryì*, Grm *bì<sup>ʔ</sup>i* [SchB], Krkr *bèedi* [GK], Bol *bòdí* [GAB], Ngm *bèdí* [NEH], Maka *bòdí*, Dera *biri* [NmK], Kupto *fédí*; 5 \**k-bVd-*: Bogh *voot*, Saya *ka-vit*, Grnt *vùru*, Tala *ka-hur*, *ka-fur* [Cs], Dyarim *ká-vòdí*; 6 \**t-bVd-* > *d-bad-* > *dvad-*: Bade *ə̀dvəd*, Duw *ə̀də̀vid*; C \**t-/k-bVd-* > *vVd-* > *vVr-* ‘night’: 1 Tera *vid-ki* [NmT]; 2 Chb *avirvir* [Meek], Bura *viri* ‘night’, *aviri* ‘at night, during the night-time’ [BlB], Klb *vù<sup>ʔ</sup>i* [MuK]; 3 HN *ivre* [Kr], FK *vələ̀*; 4 Jimj *dávə̀den* (< *t-bVd-*), Bata *káadə̀* [Mo], FB *kidí* (< \**ka-bVd-*), FM *vùdí* Nzn *vide*, Mwl *vùdó* [Kr], Gude *və̀dā*, Jimj *və̀dān*, Tsuvan *və̀dē*, Sharwa *və̀dākə̀* [BrJ]; 5-5a Pod *və̀da* [Mo], Wnd *vad*, Gdf *vide*, Gava, Chn *v<sup>o</sup>dē*, Chk *vide*, Glv *av<sup>o</sup>da*, Dghw *vde* Gvoko *rvede*, Hdi *rvidik* [HmG]; Lmn *ə̀rvidi* [Wff], Hdi *rə̀-vidi-k* [BrH] (< *dvede* < *t-bede*), Hitk *vidí* 6 Daba *vùdū*; 7 Mofu *ta-vád*, Gis *duvudu*,

Mafa *vad*, Chv *vàd*, Ould *la-vad*; 7a Skn *vəd*; 8 Afd *fadē*, Ngala *budi*, Sao *fade*, Mak *fade*, Gulfei *fāde*, Kus *mvāde* [Sol: 188], Log, Kus *nvadē*, Makari *fadē* [Al]; 6 Musgoi *vədu*; 9a Gdr *dáfda* (< *t-bda*) [Mo: 18]; E 4 Mawa *bədə-ŋ* [HuJ], Sok *bāde-m* [Luk], Barein dial. *bòdō*, *bòodóm*, *bòdó*, *bodo*. Note ‘plain’ –*d*- in Kuseri and Makari according to [Sol], but –*d*- in modern dictionaries. \**bVd*- > *bVd*- due to dissim. of two voiced plosives.

//Sem Akk *bādu* (NA) ‘evening’ [CAD b: 27], ECush Som *baaday* ‘be late; stay overnight’ [LIS], Beja *bāda* ‘Dämmerungstunde’, *bād’a* ‘Dämmerungszeit am Abend oder Morgen’ [RBd], Berb Ghad *ibed*, Ahag *ehod*, Ghat *ihed* ‘night’ [NZ: 26]. A loan from Chadic into Berber languages can not be excluded.

[JgIb \**bd*, ISv:15, GrL: 298, for CCh \**vid* see GrR].

**44. \**badVH*- > *badi* ‘dawn, morning’:** W 2 \**bit*/\**bit* < *badi* (vowel assim. and regular devoicing in auslaut): Ngas *bit* ‘morning, dawn (just before sunrise)’ [Fl], *bit* [JgN], Mpn *bit* ‘morning, pre-dawn (while still dark)’, Chip, Mnt *bit* ‘morning’ [JgC], Mghv *bit* ‘morning, daybreak’, *mbit*, [BIM], Mush *ku-bit* ‘morning’ [JgO]; 3 Ngm *badi* ‘morning’, *bādaa* ‘dawn’ [NEH]; 7 Fyer *bit* ‘Morgen’ (< W 2) [JgR]; 9 Msg *bāadi* ‘morgen, tomorrow’ [LkM]; E 3 Tum *bād* ‘tôt, early’ (shift of emphat.: *bad* > *bād*).

Note the following forms as Arabic (Kanuri?) loans: W 6 Ngz *bādī-tú* ‘to begin’; C 8 Makari *badi* ‘beginning’ [AIM]; 5a EDng *bāddiyē* ‘commencer’, 5b Brg *bādi* ‘commencer’.

//Cf. Sem Arab *bd*<sup>?</sup> ‘commencer’, *bdw* ‘commencer, paraître’ [BK: 94, 99], Sab *bd*<sup>?</sup> ‘beginning, first occasion’ [Bl: 35], Soq *béde*, Jib *bde*<sup>?</sup> ‘to begin’ [DRS: 44].

Differently see in [HSED № 172, TN №13].

**45. \**bVd-m/n*- ‘cave, burrow’:** 6 Buwal *bādam* ‘cave’, Daba *bādām* ‘grotte, caverne’, Mina *bādām* ‘cavern’ [FrJ]; 7 Chv *bādām* ‘grotte’, Mofu *bādām* ‘cavité sous un rocher’, Mafa *bodom* ‘grotte, cavité’; E 5a WDng *bīdīnè*, Bid *bīdāne*, Mig *béddāné* ‘terrier’, EDng *bīdīnē* ‘le terrier, la tanière’.

Denom. verb: C \**a/m-bad*- ‘to dig out’: C 7 Mafa *mbad*- ‘déterrer (la partie cachée d’un objet sans toucher la partie apparente)’; 3 Bana *vādī* ‘déterrer, gratter’; 7 Chuv *mévédēy* ‘déterrer’.

Pl. in *-r-*: C 7 Mafa *badar-* ‘déterrer (de nombreux objects)’.  
 //Sem Arab *bawd-* ‘puits’ [BK I: 177], E Cush Som *bud* ‘grave’ [LIS],  
 Afar, Saho *bod* ‘spalten, aufgraben’, Afar, Saho *bodo*, Bilin *bid*  
 ‘Loch, Grube’ [RA].

**46. \*bVd- ‘mosquito’:** W 3 Dera *bárà-k* (< *bVd-k*) [NmK], Bol *bòdò-tì* ‘mosquito’ [GAB]; 6 <sup>ʔ</sup>*VbVd-*: Ngz *vàdàdùwà* (*v-* < *-b-*), Duw *àvədùwà* ‘mosquitoe(s)’, WBade *àvdàdùwan* ‘mosquito’; E 3 Ndam *bidé*, Smr *bédē* [JgIb], Tum *bəəd* ‘mosquito’

**47. \*bit(t)- ‘to extinguish, to end’:** W 1 Hs *bíčè* ‘to go out (lamp, fire), extinguish’; 2 Ngas *pit* [Fl], Mghv *pìt* ‘to put out fire, switch off light’ [BlM], Mpn *pìt*, Goem *pìt* ‘extinguish smth; quench thirst’ [Hlw] (regress. devoicing of the initial); 3 Krkr *mbutu* [Nm], Bol *mbittu* ‘to extinguish (fire)’ [GAB], Pero *pittò* ‘to quench a fire’; 5 Guus *mbəcá* ‘to extinguish (fire)’ [CrG], Zaar *mbəcá* ‘to extinguish’ [CrZ]; 7 Bok <sup>m</sup>*bit* ‘beenden, zu Ende sein’ [JgR]; C 4 Bch *mburə* [Nm]; 7 Mol *mbat* ‘to turn off’ [FsM]; E 4 Barein (dial.) *biito*, *bìto*, *bītó* ‘to extinguish’, Mawa *bidij* ‘éteindre’; 5a Mig *bittò* ‘éteindre’, *bàttò* ‘s’éteindre’, Bid *bat*, *bit* ‘s’éteindre (le feu)’; 6 Mok *báàtè* ‘manquer, mourir’.  
 //Sem Arab *btt* ‘achever, terminer’ [BK I: 81], Mhr *butt* ‘se perdre’ [JnM], Berb Tawl, Ayr *batway* ‘se perdre, s’égarer’ [NZ: 137].  
 [Nm *\*b-t* ‘to extinguish’].

**48. \*but- ‘to untie, separate, release’:** W 2 Mghv *bwot* ‘to let go of’ [BlM], ‘separate, divorce’ [JgS]; 4 Paa *mbuta*, *mbuda*, Miya *but-*, Kar *bit-*, Wrj *bəč-*, Tsagu *but-* ‘to untie’ [SkNB], Miya *bəta* ‘to untie, release’ [Sch]; 7 Tambas *bubwet* ‘to untie’ [RC]; C 10 Masa, Gizey, Musey, Lew, Ham, Marba *bùt* ‘déliier’ [LexC], Dzpw *bùt* ‘découdre; démêler, dérouler, détacher’, Masa *bùt* ‘divide, separate, divorce’ [CC], Musey *budta* ‘dénouer, déplier; déliier, libérer, délivrer’ [ShyM], Azum *butà* ‘to release (primary meaning), untie, loosen’; E 5 Mig *bóttó* ‘peigner’. Cf. E 1 Kera *bití* (vowel assim.) ‘lâcher, annuler; to loosen, release, cancel’.

//Cf. Arab *btʕ* (*a*) ‘quitter qqn, s’en séparer’ [BK I: 82].

The next isogloss may cognate (terms for ‘to untie’, ‘to release’ and ‘to open’ are confused in Azumeina).

**a. \*bVt- ‘to open wide, expand’:** W 3 Bol *bittaa* ‘to expand, open

wide' [GAB]; 10 Azum *butà* 'to open (a sealed jar)'. Cf. W 3 Kupto *bòotéy* 'to reveal (a secret), uncover, clarify'.  
 Deriv. C 10 Dzpw *bùtòŋ* 'grand ouvert'.  
 Deriv. W 3 Krkr *bìt-laau* 'to open out, expand' [GK].

**49. \*bVt- 'to cover, wrap':** W 2 Goem *bát* 'to fold smth (cloth, etc.)' [Hlw]; C 3 Bana *bàti* 'protéger (de)'; 5 Pod *mbuta* 'to wrap up'; 10 Masa, Ham, Lew, Marba *bòt* 'couvrir avec couvercle' [LexC], Musey *bodía* 'étendre, couvrir; la couverture' [ShyM].  
 Cf. W 1 Hs *bútáa* 'a variety of thatching grass' (as a cover).  
 // ECush Som *baati* 'type of cloth' [LIS].  
 Note C 7 Mbuko *bàbat* 'couvrir' (compensatory redupl. < \*Hbt/t, \*nbt).

**50. \*bVt- 'to deceive':** W 3 (compensatory redupl. < *b-h-t* ?): Krkr *bàabàatu* 'to deceive, trick' [GB], Bol *bàttaa* 'to trick; to scare' [GAB], Maka *bètt-* [SvP]; C 6 Buwal *bàt* 'to deceive'; 7 Mafa *bét-, béd-, pét-* 'amadouer qqn, tromper'; 10 Musey *mbadía* 'flatter, tromper; la tromperie' [ShyM], cf. 5a Hdi *batay* 'to plead, flatter'.  
 //Sem Arab *bht* 'mentir, calomnier qqn' [BK I: 179f].

**51. \*bVt- 'to blow, smoke':** C 3 FK *bàtə* 'to blow as the wind'; cf. 6 Buwal *bàc* 'to operate bellows', Mina *bác* 'to blow'; 7 Zlg *vit* 'enfumer'; E 5a Mig *bóttó* 'enfumer', Bid *bòt* 'enfumer un trou pour déloger un gibier'.  
 //Cf. Om Wolt *beeta* 'storm' [LmW: 325].  
 a. **\*bVt- 'to fan':** W 5 Dott *bat* 'to fan' [CrD]; C 4 Gude *bawutə* 'to fan'; 5 Pod *búta* 'éventer'; 9 Mulvi *vàdí* (voicing in medial position and dissim. of plosives) 'éventer'; E 3 Tum *bàād* 'éventer'.  
 Derived noun: C 9 Mnj *baaday* (-d- < \*-t- is regular) 'évantail'.

**52. \*bVt-** (possibly, < \*HVbVt-) **'to push (down), to strike':** W 2 Goem *bat* 'to push aside either with hand or foot' (apud [TAS: 12]), Ngas *but, bet, bat* [Fl], *bèt* [[JgN] 'to push', Mghv *bèt* 'niederschlagen, stossen' [JgS], *bèt* 'to push down' [BlM], Mpn *bèt* 'to push'; 3 Kupto *bòotéy* 'to beat (with hand); to slap', cf. Bol *bùutu* 'to knead' [GAB]; 5 Zaar *vot* (v- < -b-) 'to beat' [CrZ]; E 5a Bid *bit* 'frapper'.  
 The next root seems cognate, cf. 'to push down' in Mghv and 'frapper',

jeter en bas' in Arabic.

a. **\*bVt-** 'to fall, throw': W 3 Krf *bit-*, Glm *bəz-* [SchB], Bure *bet-* 'to fall', 4 Miya *bəta* 'to throw, shoot' [Sch]; C 6 Buwal *bat* 'to sink'.

Deriv. W 3 Kupto *bàatù-mà* 'falling down due to slippery'.

//Sem Arab *hbt* 'frapper, jeter en bas, précipiter en poussant' [BK II: 1379]. Akk *abātu* 'to destroy, ruin', *abut* 'ruined, decayed' [CAD a: 41]. For a root variant cf. №61.

**53. W \*bVt(t)- 'to be weak, tired':** 2 Goem *biet* 'poor' [Fp], *byet* 'to be too weak for smth, be too weak to do smth; become weak or useless' [Hlw]; 3 Bol *mbutu* 'to tire out, be tired from' [GAB], Tng *buta-k* 'old thing'. Cf. C 2 Klb *bàtù* 'to pant' [MuK]

//Sem Arab *btt* 'excéder de fatigue, surmener (une bête de somme)' [BK I: 81], Geez *btt* 'wear out, become old and worn out', Amh *bättätä* 'wear out', *butatto* 'worn-out cloth', Harari *bututtu*, Tna *bätbätä* 'grow old' > Cush Oromo *bututtū* 'worn-out cloth' [LsG: 113], cf. Oromo *bututtuu* 'rag', *bututaa* 'tired' [Grg].

For a 'root-variant' cf. C 7 Mbuko *butoy* (< *\*but-*) 'se faner' and Sem Arab *bṯt* II 'être fatigué' [BK I: 134-5].

**54. \*but-** 'soil, mud': W 3 Tng *bude-ke* (regular voicing in medial position) 'mud', Dera *bùt* 'filth' [NmK]; E 5b Kaj *bùutù* 'sol'.

Denom. verb: C 2 Bura *buta* 'to fill in dirt for a floor or for grading a road' [BIB].

//Cush agaw *\*bət-a* 'land, country, soil': Bilin *bəta* 'soil, sand, filth', Xamir *bət'a* 'soil', Aungi *bəti* 'earth' [ApAg: 59]. Cf. Om Wolt *biitta* 'soil, earth, land', Dawro *biitta*, *bitta* 'dust', Gamu *bitta*, Dace *biitta*, Zalo, Gofa *bitta* 'soil, land'. According to [LmW: 325], Omotic and agaw forms follow "Old Cushitic (Cushitic and Omotic) stem *\*biy-* with addition of a formative suffix in dental".

**55. \*but-** 'flour' (pl.): C 4 Nzn *mbùçi*, Bch *ùmbótó* [Jglb], Gudu *ku-mbócù*, Mwl *ùmbótì* [Kr], note *m-* as a sing. pref.; E 4 Mawa *but*, Sok *bítā* [Jglb] 'farine'; 5a WDng *bùdbàt* pl. 'farine fine', Mig *bittá* pl. 'farine', 5b Jegu *bút* 'flour' > *bút ko ook* 'ash' = 'flour of fire' [JgJ], Tor *bùt*, Mubi *bùt* (coll.) [JgM], Brg *bùtà* pl. 'farine'. Note the following correlation in ECh 5 languages WDng, Migama, Birgit: 'flour' pl. ~ 'ash' sg.

**a. \*(bV)-but- ‘cold ash, salt’:** 2 Ngas *mbìt* ‘soot’, *mbùt* ‘smut’ [JgN]; 3 Gera *bàdǎ* [SchB], Bol *bùtó*, Grm *bùtá* [JgIb], Ngm *bùto* [NEH], Bele *bùtó*, Krkr *bìto*, *bùto* [GK], Bure *bùutó* ‘ash’, Maka *bùtó* ‘salt’ [SvP]; 4 Paa *bəti-ki*, Diri *butu* ‘ashes’ [SkNB]; 5 Grnt *bùuši* < *\*buti* [Ja], Buli *bádár* (*bVt-r-* pl?) ‘ashes’ [Cs]; 6 Ngz *bábát* [SchN], *bébééd* [JgIb], Duw *bàbut*, WBade *pəbát-ən* (dissim.); C 7 Dugwor *bùtá*, Zlg *bíté*, Baka *viti* [BAS], Muy *viti* (< *\*b-vVt-* < *\*bVbVt-*); 8 Bud *budén* ‘Asche’; 9a Gdr *bátù* ‘salt’ [FrG]; 10 Musey *bud-na* ‘ash’ [ShyM], Gizey, Masa *bùdùw*, Ham, Musey, Marba *bùt*, Lew *bùt* ‘cendres froides’ [LexC], Dzpw *bùt* ‘cendre, sel végétal’, Dari *būt*, Peve *būt*, Hedè *butu*, Ngidè *pùtù*, Zime *bud* ‘ash’ [Shy *\*but*], Azum *but-nà*; E 5 ‘ash’: 5a Bid *bùtò*, Mig *bítí* m., EDng *būtū* coll., WDng *bùtù* m. sg. coll., 5b Tor *bùuti*, Brg *bùtì* (f.); 6 Mok *bítì-kè* ‘tisson’.

[Nm *\*bətu*, IgIb *\*bt* ‘ashes’].

**b. C *\*bu-but-* ‘dust’:** 4 Gudu *búbùutà* ‘dust’ [Kr]; 7 Ould *bàbàt* ‘poussière (de bois, mil)’. Cf. C 8 Afd *buddih* ‘Staub, dust’ [Sol: 122]. W 1 Hs *há-bāi* ‘ash’ is rather a loan, cf., eg., Arab Soud *habūd* ‘cendre’ [DRS: 356].

[AA 2 №75 *\*bət*: Eg *wbd* + WCh 3, E 5a Dng, Bid; HSED №353].

**56. *\*bVyVt-/\*abVt-* ‘hut’:** W 2 Mpn *bit* ‘temporary shelter’, Mghw *bìt* ‘hut, house, home’ [BIM], ‘Grasshütte’ [JgS]; 3 Krkr *bīiti* ‘place’ [GK]; 7 Kul *ʔàbùt* ‘Hütte’, Bok *bút* ‘Hütte der Ful’ [JgR], DB *but*, Bok *bút*, Monguna *àbùt* ‘grass hut’ [RC]; C 5 Dghw *bàtiwè* ‘hut’ [JgIb]; E 5a EDng *bītī* ‘lieu entre les concessions où les voisins se reposent’.

Denom. verb in *m-*: C 6 Buwal *ᵐbāt* ‘domesticate’.

Denom. verb in *ʔa-*: *ʔa-bVt-* > *bVt-*: W 7 Monguna *bét* ‘to build house’, *bət mušét* ‘to mould pot’ [RC].

//Sem *\*bayt-* ‘tent, maison’ [DRS: 63], Akk *bātu* ‘to stay overnight’, *bītu* ‘house, shelter, room, tomb, container, place’ Oakk on [CAD b<sub>1</sub>: 282], Ug *bt* ‘to stay the night, lodge’, *bt* ‘house, home, family’, Pun, Phn *bt* ‘house, building’ [DUL: 241, 243], Geez *byt* ‘spend the night’, *ʔabeta*, Caus., also ‘overnight’, *bet* ‘house, room, family’, also Aram Syr *baytā*, Sab *byt*, Hbr *bayit*, Soq *beyt*, Tgr, Tna, Amh *bet* ‘house’ [LsG: 116f], Arab *byt* ‘passer la nuit dans un endroit’, *bayt-* ‘maison’ [BK:181].

[AA I №138, Sem, Ch Mghv, Kul, Bok; HSED №253].

**57. \*bVt-** ‘sisters, clan’ pl., **\*bVwVt-** ‘sister’: W 7 Fyer *bèt* ‘Geschwister, siblings’ (pl.) [JgR]; C 5a Bid *boote*, pl. *sèney* ‘soeur’; 5b Tor *bòot* ‘sister’, *bèeta* ‘clan’. Cf. C 7a Skn *bwota* ‘closely cooperating group of people’.

//Berb Mzab, Wrgl *betti*, Nef *batti* ‘tente paternelle, soeur de pere’ [NZ: 135].

**58. \*bVwVt-** ‘distress, failure’: W 3 Bol *buuti* ‘unfortunate situation’ [GAB], Krkr *buuti* ‘distress, troubles’ [GK] ‘Plage, Kummer’ [LkL]; C 5a Hdi *bətbət* ‘in vain’; E 6 cf. Mok *búttè* ‘faux, mal préparé’.

//Sem OffAram *bwt* (the substantive of unknown meaning, presumably: ‘burden’ or ‘shame’ or ‘trouble, distress’) [HJ: 148].

**59. [\*bat-] > \*bat-** ‘to tear off’: W 3 Bol *botu* ‘to break rope’ [GAB]; C 5 Mlg *həta* ‘zerreißen; entfernen’; 10 Ham, Lew, Marba *bát* ‘arracher’ [Lex], Dzpw *bát* ‘arracher des mains’, Dari *bāt* ‘arracher’, Azum *batá* ‘to wrest’.

//Sem Arab *bṭ* ‘déchirer une robe toute neuve, blesser, déchirer jusqu’au sang’ [BK II: 156].

a. For a root variant cf. **\*bVt-** ‘to pull, tear’: W 2 Grk *bat* [Fp], *g-bát* ‘pull’ [BIY]; C 4 Gude *butə* ‘to pull out’; 7 Ould *-bāt* ‘arracher’, Mbuko *bébet* ‘éplucher, décortiquer’; E 5 Mig *bítáw* ‘arracher (pieu, arbre)’.

//Sem Arab *btt* ‘couper, retrancher en coupant, ou enlever en arrachant’ [BK I: 81]

**60. [\*bVt-] > \*bVt-** ‘to flow, pour’: W 2 Mpn *bwét* ‘to pour’ (pl. *fo*); C 10 Gizey, Masa, Ham, Musey *bát* ‘couler (fleuve)’ [LexC], Dari *bāt*, Dzpw *bát* ‘couler’.

Derived noun: C 3 Bana *bətəbətə* ‘tiède’, cf. C 2 Klb *bìti* ‘water’ [MuK].

//Sem Arab *nbṭ* ‘sourdre (se dit de l'eau qui sort de la source)’ [BK II: 1185].

Cf. C **\*bVt-** ‘to pour’: 3 HF *bìtiyi* ‘to pour’ [Kr]; 7 Zlg *bàbùt* ‘déborder en bouillant’, 6 Mbedam *bàt* ‘verser’ [NdP].

**61. [\*bVt-] > \*bVt-** ‘to lay down, drop’: W 2 Ngas *bwot* ‘to lay, place’ [JgN], Mghv *bwot* ‘to drop’, *bwot nkum* ‘to pour libation’ [BIM], Gmy *bwát* ‘to lay smth down, cause smth to lie’ [Hlw]; C 10

Mus *badta* ‘se coucher (le soleil); perdre, tomber de la main’ [ShyM].  
 //Sem Arab *ʔbt* ‘jeter en bas, laisser tomber’ [BK I: 4], *hbt* ‘rouler et tomber en bas; descendre, jeter qqn’ [BK II: 1381], Hbr *bṭḥ* ‘tomber par terre’ [DRS: 59], Berb MC *bḍu* ‘tomber, dégringoler’ [NZ: 29].

**62. [\*bVt-] > \*bVt- ‘to strike’:** W 2 Mpn *bwét* ‘to hit, shoot, attack’,  
 3 Dera *bwátà* ‘a whip’ [NmK]; E 6 Mok *báttè* ‘gifler’  
 //Sem Arab *hbṭ* ‘jeter qqn, frapper’ [BK II: 1381].

**63. [\*bVt-/\*bHt-] > \*b[a]t(t)- ‘to cut, split’:** W 3 Bol *bòttu* ‘to cut through, across’ [GAB], Ngm *bat-* ‘to cut’ [IbN], *bàtô* ‘circumcision’ [NEH], Gera *bâd-mì* ‘to cut off; slaughter’ [SchB] Maka *bòtì* ‘to cut’ [SvP]; C 10 Gizey, Musey *bét* ‘fendre (calebasse)’ [LexC], Mus *bedta* ‘diviser une chose rond pour ouvrir’ [ShyM], Azum *betá* ‘to split and open up a fish (to dry)’; E 6 Mok *báttè* ‘fendre’.  
 Deriv. in *-k-*: W 3 Ngm *bàt-kô* ‘to break rope, cut’ [NEH].  
 //Sem Arab *bʕṭ* ‘égorger’ [BK I: 143], *bṭ* ‘égorger un animal jeune, gras’ [BK II: 156].  
 Cf. [HSED №241].

**64. \*bVt/[t]- ‘fog’:** W 4 Wrj *bata-na* ‘harmattan, mist, fog’ [BIS], Wrj *bata-na*, Paa, Jmb *bata*, Diri *abata*, Miya, Kar *baṭə* ‘fog’ [SkNB], Miya *bàtə* ‘haze’ [Sch], Paa *bàtáa* ‘fog’ [MS]; 6 Bade *bàtùunai* ‘haze’ C 8 Log *bututu* ‘fog’ [AIL]; E 4 Barein dial. *bùtùtù*, *bitimbe*, *bítim* ‘fog’; 5b Mubi *bùtutú* coll. ‘brouillard’.

**65. W \*but- (< \*bVt- ) ‘belly, stomach’:** 2 Grk *but* ‘in’ [FI], Ngas *but* ‘belly, pregnancy’ [FI], *but* ‘belly, womb, stomach, mind’ [JgN], Chip *but* [Kr], Mnt *bəət* ‘Bauch’ [JgC], Mpn *būt*, Mghv *but* ‘stomach, inside’ [BIM], Goem *bət* ‘belly’ [Hlw], Mush *but* ‘stomach’ [JgO]; 5 Geji *bóoti* ‘guts, intestins’ [C №64]; 7 Fyer *buto* ‘stomach’ [JgR].  
 //Sem *\*baṭn-* ‘ventre’: Aram *bṭn* ‘belly’ [JH: 151], Hbr *beṭen-* ‘ventre’, Arab *baṭīn-* ‘intérieur’ DRS: 60].  
 [JgIb *\*btl*, AA 2 №76, HSED №350].

**66. \*bVh- ‘to paint, draw lines’:** W 2 Mpn *bée*, pl. *báak* ‘to design, decorate by coloring’; C 7 Zlg *bàh* ‘enduire, peindre’.  
 Derived noun: E 5a EDng *búuyà*; 6 Mok *búùyè* ‘peinture’.

//Sem Geez *bḥbh* ‘paint, draw, create, make’ [LsG: 91].

**67. \*bVHVy/w- > bii/buu ‘to cut, split’:** W 2 Ngas *bii* ‘to split’ [JgN], Mghw *bée* ‘to dissect, cut, split open’ [BlM], ‘ein Zeichen Machen, eine Linie ziehen’ [JgS], Mush *bée* ‘to crack’ [JgO], Mpn *bée* ‘to snap, divide, cut with a knife’, Goem *bé* ‘to split smth into its parts’ [Hlw]; 4 Kar *búu*, *bàbú*, Siri *búu* ‘to cut, chop’ [SkNB]; 6 Ngz *bìyú* ‘to gut an animal by slitting open its stomach’..

//Sem Arab *byḥ* II ‘couper en petits morceaux (la viande)’ [BK I: 182]. Common origin with ‘to break’ seems evident, Terms for ‘to cut, chop’ and ‘to break’ are often confused in Chadic and Semitic languages

a. **\*baHVy- ‘to break’:** W 4 *\*ba-* ‘to break’: Kar *baa-*, Jmb, Mburku, Miya *ba-*, Tsagu *baa-*, *boo-* [SkNB], Wrj *bəbə* ‘to break’ [BlS], Miya *ba*, pl. *bàhiy* ‘to break (pot), split (firewood); slap’, *buwyə* ‘to break (stick)’ [Sch]; 7 Mol *bay* ‘to hit’ [FsM], 7a Skn *bava* ‘to break’; E 1 Mobu *báyé* ‘casser (bâton)’; 2 Lele *bòy* ‘casser’, Kaba *bàyi*; 3 Smr *bi* (< *bayi*) ‘to break’ gen. [Jglb].

//Cf. PECush *\*ba<sup>2</sup>-* ‘to become destroyed’: Som, Sid *ba<sup>2</sup>-*, Had *bi<sup>2</sup>-* [Ss: 50].

b. **\*b/bab- ‘to smash, pound’:** W 2 Mghw *bwap* ‘to knock’ [BlM], Goem *bàp* ‘to finish or destroy smth’, *bwàp* (internal –w- pl.) ‘to beat or hit at smth repeatedly’; Ngas *bwaap* ‘to smash, crush’ [JgN]; C 4 Gude *babə* ‘to pound flat’, FB *bwabi* ‘to squeeze’ [Kr]; 7 Mada *ómbòb* ‘aplatir, écraser, tasser’.

Ch **\*b/bab-** may follow **\*baHVy- ‘to break’**. Alternatively, may be taken for a ‘compensatory reduplicated’ variant of Ch **\*hVb** ‘to destroy, crush underfeet’ [CLD V №101].

**68. \*bahVw- > \*bah<sup>w</sup>- ‘to pierce, prick > sew’:** W 7 Bok *bo* ‘to pierce’ [RC], Fyer *bòo* ‘erstecken, erdolchen, ausbohren’ [JgR]; C 6 Buwal *bàw* ‘to pierce’; 7 Muy *ábáx* ‘to prick’, Mofu *báh<sup>w</sup>-* ‘percer’, Baka *bah* ‘coudre, piquer’ [BAS], Mol *bah* ‘to sew’ [FsM].

//Cf. Sem Arab *bwh* ‘cohabiter avec une femme’ [BK I: 181].

a. **\*biHVw- > \*biyu ‘to pierce’:** W 4 Wrj, Miya *bìy-*, Siri *bìyu*, Kar *bìya*, Diri *buu* ‘to pierce’ [SkNB], Miya *bìy* ‘to stab, pierce’, (plurac.) *bìyabiya* ‘pierce many, dig many’ [Sch], Paa *bii* ‘pierce’, *bìbii* (pl.) ‘to make many holes in’ [MS]; 10 Dari *bīē* ‘piquer’, *bīē tū* ‘se scarifier’, Dzpww *bé* ‘piquer, scarifier’.

Cf. W 2 Mghv *biy-ay* ‘to inject, pierce, prick’ (pl. in *-aN-*).  
Derived noun: W 2 Mnt *bo* [Fp], Goem *bau* [Hlw] ‘arrow’.

**69. \*bVH- > bVw-** ‘to hide (oneself), conceal’: W 1 Hs *ḥóoyè, buuyaa* ‘to hide, conceal’; 2 Ngas *ḥóo* ‘to reserve, keep aside (secretely)’ [JgN]; C 1 Hona *ḥiḥye-η*, Boka *ḥubweya-dá* ‘to hide’ [Kr]; 7 Muy *ábú* ‘to hide, avoid’, Mada *ábyá*, Mofu *-ḥ-* ‘(se) cacher’.  
Derived noun: W 1 Hs *má-ḥóoyáa* ‘hiding place’.  
//Sem Arab *bā<sup>c</sup>-at-* ‘endroit couvert, à abri de la pluie’ [BK I: 179].

**70. \*bVH > bV(h)- ‘to ferment’**: C 2 Mrg *ḥù* ‘to apply fermentations’ [HfM: 21].  
Derived noun: W 3 Krf *ḥwáù* ‘bitter, sharp (taste)’; 7 Mafa *ḥóh<sup>w</sup>* ‘acidulité’.  
//Sem Gees *bəḥ<sup>a</sup>* ‘be fermented, turn sour’, *bəḥu<sup>?</sup>* ‘acid, sour’ [LsG:90].

**71. \*(m)bV, (m)bVh- (pl.) ‘to give birth, germinate, hatch’**: W 2 Goem *ḥé* “see main entry *la* ‘to give birth’ (sg.)” [Hlw], Ngas *ḥii*, Mushere *ḥee* ‘to hatch’ [JgN, O], Mpn *ḥée* (pl.) ‘to give birth’; 4 Jmb *bii* [SkNB]; 5 Zaar *ḥwaa* [CrZ]; C 4 Nzn *bo, mbúho* [JgIb], Sharwa *mbôe*, Cuvan *mbùn* ‘to give birth’ [HuJ], Jimj *bo* ‘enfanter’ [Mo]; 6 Daba *mbù*, Mina *mb-* [FJ], Buwal *mbaw* ‘to give birth’, Gavar *mbu* ‘accoucher’; 7 Cf. Ould *-ḥi* ‘s’éclore’; 8 Makari *ba he* ‘to bear child’.  
Cf. W 2 Mghw *ḥéé* ‘new shoot by plants, sprout’ [BlM].  
Cf. CCh *\*mbiw* ‘to give birth’ (including Gude *pàwá* ‘birth’, Jimj *puaan* ‘accoucher’) [GvR].  
Derived noun: **\*(m)bV ‘child’**: W 3 Bol *bèe*, pl. *dande* [GAB], Krkr *bèe*, pl. *leewày* ‘son’ [GK]; C 6 Mina *mbà* [FJ], Mbedam *mbu* [NdP], *mbo* [LMb], Buwal *mbòo*, Gavar *mbə* ‘child’.  
Cf. W 2 Goem *mbú* ‘calf of a cow’ [Hlw], C 5 Pod *ḥiwá* ‘nouveau’.  
//Eg *bḥ* NR ‘gebären’ [EG I: 472], cf. Cush Saho *baahe* ‘bring (forth)’ [Vr], Afar *bah* ‘geben, darreichen; zur Welt bringen, gebären’ [RA]. [HSED №306. Cf. TN №115 (Ch ‘to give birth’ & Gees *bḥbḥ* ‘to paint, draw, portray, create, make’ [LsG: 91]).

**72. \*bVH- ‘to rise, to mount’**: C 4 Bch *ḥu* ‘to mount’ [Kr]; 10 Masa *ḥè* ‘monter sur’ [CC]; Cf. 3 FK *mbá* ‘to raise, resurrect’.

Redupl. \***6V6V**: W 3 Ngm *bàabà* ‘above’ [NEH]; C 3 FG *bwuvu* ‘to lift’ [Kr]; 7 Mofu *-bábiy-* ‘voleter, sautiller; hop’.  
//Sem Arab *nb*’ ‘être haut, élevé’ [BK II: 1178].

**73. \*bVHVy- ‘to be bad, evil (spirit)’<sup>26</sup>**: W 3 Pero *bóu* ‘devil’; C 1 Gbn *bìbà*, Gaa *bìba* ‘evil’ [Kr]; 3 FK *bay* ‘bad’; 4 Gude *bwàyi* ‘bad, evil’; 8 Bud *abi* ‘schlecht sein’ [LkBd], Log *mbáawee*, *mbáwe* ‘to be bad’ [LkL]; 10 Dzpw *bāi* ‘mal, mauvais’; E 5a Bid *beyò* ‘méchanceté’; 5b Jegu *bayô-t* m. ‘schlecht’; E 6 Mok *bèyyé* ‘bad spirit’.

Derived noun in *m-*: W 1 Hs *má-biyaa* ‘the spirits which are supposed to cause the various forms of hysteria’; 3 Kupto *mbú’ya* ‘whitchkraft’.  
//Sem Arab *b<sup>6</sup>w* (*a, i, u*) ‘commettre un crime, se rendre coupable d’une trahison; atteindre qqn et lui nuire de son mauvais œil; susciter à qqn un malheur’, *ba<sup>6</sup>w-* ‘crime’ [BK I: 144],

Cf. [TN №144, 324 with alternative etymologies for Ch]. Note Eg *b* ‘Böses’ o. ä. (Sp) [EG I: 410]. However, the existence of the latter form is declined by a number of scholars [see EDE II: 3].

**74. C \*(n-/ʔa)-bVh<sup>w</sup>- ‘carp’**: 5 Wnd *nabeh<sup>w</sup>a* ‘carp’ [Voc]; 7 Ould *ābùh<sup>w</sup>á* ‘carpe’, Muy *ábàh<sup>w</sup>ú* ‘carp’, Mafa *boh<sup>w</sup>a<sup>ʔ</sup>a* ‘gros (poisson)’, cf. Mada *bòhò* ‘petit poisson sec sp.’.

**75 \*ba/uy- ‘to fill, be full’**: W 1 Hs *bùgu* ‘be replete’, *bággà* ‘absolute repletion’, C 3 Bana *báxá* ‘(se) rassasier’; 5a Lmn *baya* ‘fill up, satisfy’, Hdi *baya-ku* ‘être rassasié, satisfié’. Cf. C 4 Gude *bùyáb* (= *puyab*) ‘swollen, fat (of cheeks)’.

//ECush Som *buuxay* ‘be full’ [LIS], Rend *buuha* ‘be full’ [PR].

**76. \*bVy- ‘to dig, enlarge (a hole)’**: C 3 FK *vàyá* (regress. assim.) ‘to dig a hole’ 7 Mafa *bobuhw-* ‘élargir (une trou)’; 10 Musey *bùhù*, Lew *bùhù* ‘élargir (trou)’ [LexC]; E 1 Kera *bìg*, *bòg-dě* ‘to dig’.

Derived nouns: a. C 3 Bana *mbày<sup>w</sup>á* ‘esp de houe pour creuser le banco’.

b. \***bVy-** ‘hole’: W 3 Krf *bòyó* ‘hole’ [SchB], Tng *buga* ‘window, opening’, 1 Hs *bùigaa* ‘a cave’. Cf. CLD V №253. \***yVb-** ‘hole’

Derived noun in *-m-* (or a loan): E 6 Mok *bùugimé* ‘précipice, caverne’.  
//Sem Arab *bh<sup>6</sup>* ‘creuser la terre, un puits, jusqu’à ce qu’on arrive à avoir de l’eau’ [BK I: 91]. For Arabic-Kera see [TN №104].

<sup>26</sup> On the semantic shift ‘bad, evil’ > ‘evil spirit’ in Chadic languages see [StM].

**77. \*bVɣ<sup>w</sup>- > ɓVɣ<sup>w</sup>- ‘to hide, to cover’:** W 4 Diri *bág<sup>w</sup>á* ‘to hide os’ [SkNB]; C 4 Bch *bóò* (< \**boyo*) ‘to hide’ [Jglb], FB *b<sup>w</sup>uy* FM *b<sup>w</sup>ùya*, Nzn *bòxən* ‘to hide’ [Kr] 5-5a Pod *bəh<sup>w</sup>á* ‘cacher’, Lmn *mbaya* ‘to cover’ [Wff], Chn *bòya-boyà*, Gava *bùya*, Dghw *bəyù-nayà* ‘to hide’ [Kr], Gdf *bəyà* ‘to hide, cover’ [KimG]; 6 Mina *bàh* ‘to hide’ [FrJ], Daba *bōh* ‘(se) cacher’, Buwal *bàx* ‘to hide’; E 1 Ndam *búgó* ‘incuber, couvrir’; 3 Tum *bāg* ‘cacher’.

Derived noun: W 1 Hs *má-bágáaa* ‘a place where a person conceals himself for the purpose of killing an animal’.

Possibly, a metath. variant of \**hVwVb-* ‘to hide (o.s.), to lie in ambush’, see [CLD V №302]. Cf. №69 \**bVH-* > *ɓVw-* ‘to hide (oneself), conceal’.

[CCh \**bay<sup>w</sup>-* ‘to hide’ [GrR].

**78. \*bV[h]- > ɓVh/ɣ- ‘to go (away)’:** C 5 deriv. in *m-*: Lmn *mbəya* ‘move, migrate’; 7 Mada *ábáhá* ‘sortir de chez soi, aller en visite’, E 4 Mawa *bea-ŋ* ‘partir, aller’; 7 Mubi *bów* ‘partir, aller’ [JgM].

//Cush Som *bah-* ‘to go out’, Arb *beh-* ‘go out’, Om Zaysse *bay-* ‘migrate’, Yemsa *bey* ‘leave’ [LmW: 311].

[Cush \**bah[h]-* ‘go away, go’ + Ch ‘to go’ [Dolg: 318], for Cush and Ch ‘to go’ see №1].

**79. \*bagVw- ‘to cut (down, in-two)’:** W 2 Mpn *bák* ‘to slice’ C 7 Mofu *-bəg<sup>w</sup>-* ‘partager, diviser, couper en deux’; E 5a Mig *bàgò* ‘terrasser, abattre’. Cf. W 3 Bol *bàgùr* ‘to split palm trunk’ [GAB].

//Sem Arab *baga‘a* ‘trancher (d’un coup de sabre)’ [DRS: 43], *b‘g* ‘fendre le ventre avec le couteau’ [BK I: 140].

**80. \*bug- ‘to pour water’** E 5a EDng *bùgò* ‘arroser, verser de l’eau’, Bid *bùg* ‘puiser de l’eau’.

Intensive stem \**bug(bug)-* ‘to pour (out, to empty)’: W 1 Hs *bùbbugà* ‘to bubble or well up or out (spring of water)’; E 3 Tum *bāg* ‘verser (pour vider), vider (en versant)’, Ndam *bāgā* ‘verser (dans); jeter (eau)’.

//For a possible cognate cf. Sem Arab *bgy* ‘verser une pluie abondante (se dit du ciel, des nuages)’ [BK I: 147].

**81. \*bug-/\*HVbVg- ‘to thresh, to crash’:** W 1 Hs *bùgaa* ‘to beat,

strike, thresh by beating with a stick'; 3 Bol *bugi* 'threshing' [GAB]; C 8 Lgw *bugu-wun*, Kus *bagu* (< \*Hbg) 'to thresh, beat (grain)' [Al]; 9 Mnj *bugi* 'casser (avec les dents)', Mlw *bùgi* 'croquer'.

Derived verb: W 3 Bol *bàgìdu* 'to do second pounding of grain' [GAB].

Derived noun: W 1 Hs *má-búgáa* 'the place where corn is threshed', *mábùgii* 'one who is engaged in threshing corn'.

//Berb Shilh *bbeg* 'broyer, écraser, presser, fouler à pied' [NZ: 33].

a. E 3 \***big-** 'to slap': Ndam *bígá* 'frapper (avec la main ouverte), gifler', Tum *mbíg* 'gifler'

//Sem Arab *hbg* (i) 'frapper avec un bâton' [BK: 365], Cush Beja *bag* 'ohrfeigen, einen Puff, Stoss geben' [RBd].

**82. \*bVg-** 'to put down, descend': C 5 Dghw *bùga-nà* 'to put down' [Kr]; 7a Skn *bágá* 'to put down' [DSk, ThS]; E 2 Tob *bāgà* 'mettre, poser', Lele *bògè* 'mettre'; 5a Bid *beeg* 'descendre'.

Note W 4 (< ?*a-bVg-* ?) Miya *bagá* 'to kneel, squat' [Sch].

For Bid < AA \**bQ* see [TN N<sup>o</sup> 111].

**83. \*(HV)bVg-** 'to surround': W 1 Hs *bágàyaa* 'to go round'; *bàgoo* 'surrounding anything it is desired to catch'; 6 Duw *viigo* (v- < -b-) 'to surround, go around'; E 1 Kera *bígí* (< *HbVg-*) 'entourer'.

Cf. W 5 Guus *bàgo* 'communal hunting' [CrG].

//Sem Arab *hbg* (i) 'entourer, cerner, assiéger' [BK I: 365].

**84. E \*bag-** 'to begin, start': 4 Mawa *baga-η* 'commencer'; 5a WDng *bàgè* 'se mettre à, commencer', *bàggiyè* 'appataître'.

Deriv.: C 10 Dari *bàgà* 'morning'; E 1 Kera *bàbàgì* 'morgens'.

//Sem Arab *nbg* 'paraître; surgir, s'élever' [BK II: 1186], Ug *bgy* 'to reveal, show' [DUL: 215], Om Wolt *beg-ott-* 'to wake up' [LmW: 316].

**85. \*bag-** 'sheep, goat' (possibly. \**bag-* pl., \**mbag-* sg.): W 2 Mpn *mbáak* 'sheep'; 4 Diri *bag<sup>u</sup>-nzi* 'male goat' (*nzi* 'male') [SkNB], C 4 Gude *bàgá* 'sheep', FJ *bàgà*, FM *bàgə*, FB *bagə-n*, Mwl *mbága-tí* [Kr], Bch *mbaga-to*, Bata *bāgé* 'sheep' [JgIb], Bata *bagay* 'goat' [Bn]; 7 Baka *tə-mbák* 'brebis' [BAS]; E 3 Smr *bàge* (pl.) 'goat' [JgSib].

Cf. C 10 Marba *bègè* 'animal domestique, richesse, biens', Masa, Musey, Lew *bègè* 'richesse, biens' [LexC]; E 4 Sok *bóogo* 'Haustiere' [Luk].

//Cush agaw *\*bäg-a* ‘sheep’: Bilin, Kemant *bäga*, Xamta *biga*. “The word also exists in Kunfāl, *bagi*” [ApAg], Xamir *begā* [RCh], Om Kafa *baggo* ‘sheep’ [RK], Shin *baggo* ‘sheep’ [Cer: 411]. Note Sem Geez *baggəʕ* ‘sheep, ram’, Tgr *bəgguf*, Amh, Gafat *bäg* [LsG: 88], with a discussion on the origin of the root: Eth vrs. Cush. According to [Dolg: 39], Cush forms passed to Ethiosemitic. Berb Ahag *ābagug*, Air *abägog* ‘jeune mouton, Ghat *abagug* ‘mouton châtéré’ [NZ: 32]. [Dolg: 39; AA 2 №101: Cush, Om, Berb, HSED №173].

**86. \*bag- ‘chief’:** W 1 Hs *báagè* ‘a great warrior’; C 3 Higi Moda *mbase*, Higi Wula *mbəgə* ‘chief’ [Meek]. Note W 2 Goem *baga* interj. ‘respectful form of greeting addressed to a chief or elder’ [Hlw].

May cognate with the next issue:

**W \*bVg-r/n- ‘big’:** 2 Mpn *bàgág* ‘big’, Chip *bagani* ‘large’ [Kr]; 6 WBade *əvgar* ‘tall, long’; C 7 Merey *bəgʷər* ‘grand’.

//Sem Geez *bagara* ‘grow, become physically developed’, Amh *bäggärä* ‘become physically developed’ [LsG: 89]. Differently (Hs, WCh 2 and Sem Arab *bgg* ‘engraisser’) see in [TN №62].

**87. \*bVg- ‘hut, cabine’:** W 1 Hs *bàagaa* ‘a stable’; 3 Maka *bèggè* ‘room’ [SvP]; C 2 Mrg *byàgù* ‘compound of a woman without husband’ [HfM: 29]; 8 Makari *boga* ‘granary’ [AIM]; E 3 Ndam *bugo*, Smr *bogaw* ‘house’ [Bn]. Cf. C 7a Skn *bəgə* ‘throne room’.

a. **\*bag- ‘fence, wall’:** 3 Krkr *baagàu* ‘town wall’; 6 WBade *bàagàn* (def. form *bàagà*) ‘town wall’, Duw *baagà* ‘wall around the town’; E 5a Mig *bùggò* ‘clôture en paille’.

Cf. W 1 Hs *bángóo* (< *\*bag-n-*) ‘a wall of any kind’ and the following forms (borrowed from Hausa?): W 3 Krkr *bango* ‘(round) mud wall of a hut’ [GK], Bol *bongo* ‘(round) wall of a hut’ [GAB]; 6 GBade *bàngàu* ‘mud wall’; C 2 Bura *banggo* ‘mud wall, mud hut’ [BIB]; 3 FK *bòngù* ‘wall of room’, Bana *bánwà* ‘mur de maison sans toit’; 5 Mlg *bángo* ‘Mauer’; E 4 Mawa *bwanga* ‘mur d'une case’.

**88. \*bug- (< \*bVHg- ?) ‘belly’:** W 4 Wrj *bugi-na* ‘stomach, belly, pregnancy’ [BIS], Kar *bigi* ‘belly’ [SkNB]; C 4 Gude *mbùgè-ránè* ‘cow's foetus’; 5a Hdi *mbuyà-mbuya* (< *\*m-buHg-*, cf. Arab) ‘stomach’.

//Sem Arab *bʕg* ‘fendre le ventre avec le couteau’, *baʕg-* ‘ventre

fendu' [BK: 140], Cush Afar *báguu* 'Bauch' [RA], LEC *\*bag-/\*bog-* 'belly': Saho *bogu* 'belly', Bayso *bog* 'abdomen, belly' [SsB: 38].

For Cush-Goem see [TN №68].

Cf. W *\*baka* 'stomach': 2 Goem *dà-bák* 'stomach' [Hlw]; 3 Bol *bàakà* 'stomach of ruminant' [GAB], Ngm *bàaka* 'stomach (internal organ)' [NEH]; 6 Duw *bàakà* 'belly, esp. large and protruding', GBade *bakà* 'stomach', WBade *bàka-n* 'belly'. A loan?

**89. \*bVg- ' (open) place':** W 1 Hs *bìgee* 'a place; a broad road', *báagáajè* 'an open space in front of Emir's compound'; C 2 WMrG *uvùgi* 'place' [Kr]; 5 Lmn *bàgà, bùgà* 'place, spot', *bùgò, bògò* 'meeting place, village, compound' [Wff].

//Sem Arab *bāg-* 'voie, grand route', magh. Dial. *bāga* 'grand espace' [DRS: 50].

a. E **\*bag- 'arable land':** 2 Lele *bàgày* 'zone inondable'; 5a Bid *bagiyàw* 'terre arable'

//ECush Gide'o *boga* 'field' [LmW: 316].

The following isogloss may be cognate with the main root (or derived from): C 10 **\*?abag- 'bush area':** Musey *bàgì/èy*, Lew *ʔábágèy*, Marba *ʔábàgèy* 'brousse près des cases' [LexC], Azum *abagaya, abagai-dà* 'the bush area'.

**90. E \*bag- 'locust, criquet':** 4 Barein (dial) *bòkkìnà, bokge, bòggé* 'criquet'; 5a WDng *bàgà* 'locust', Mig *bággù*, Bid *bágo* 'criquet'; EDng *bāgā* f., *bāgò* m., 5b Brg *bàgáy*, Tor *bage* 'sauterelle', Jegu *bágó* 'Heuschrecke'. Note 2 Kaba *bagbag* 'spider' [HmK].

a. E 5 **\*bVg- 'to jump, hop':** WDng *báágé*, EDng *bàagē* 'bondir sur, sauter sur', 5b Mubi *bùgí* 'sauter' [JgM].

//Consider ECh as a possible metath. variant of Sem *\*hgb* > Ug, Hbr *hgb* 'locust', JudAram *hgbʔ* 'hopper, locust' [DUL: 352], namely: *\*hVgVb-* > *gVb-* > *bVg-*.

**91. \*bak- 'to beat, to pound':** W 2 Ngas *bak* 'to slap, beat' [FI], Mpn *bàk* 'to pound, beat', *bák* 'to flatten'<sup>27</sup>, Mghv *bák* 'to strike, pound' [BIM] 3 Pero *búkkò* 'to knock'; 5 Zaar *búk* idf. 'thud' [CrZ]; 7 Sha *<sup>m</sup>bak* 'to drum' [RC]; C 5 Wnd *bak* 'to beat' [JgIb].

<sup>27</sup> For Mpn 'to flatten' < AA *\*bQ* 'thin, flat' see [TN №310].

//Berb Shilh *bbek* ‘damer, écraser, piler, battre les grains’ [NZ], Om Basketo *bukk-*, Doko *bok-* ‘hit’ [BnO: 327]. Cf. Sem Arab *bkk* ‘presser, serrer dans la foule; briser, casser’ [BK I: 52]. [HSED №194].

**a. \*bVk-** ‘to push, drive’: C 2 Bura *buka* ‘to push’ [BIB]; 7 Ould *bàkày* ‘chasser, poursuivre, conduire’; E 5a EDng *bòké* ‘abstossen’ [Ebb].

Deriv.: C 4 Gudu *mbúk-sì* ‘to push’; E 5a WDng *bòk-çiyè* ‘chasser, écarter’.

//Sem Arab *bkkb* ‘bousculer, refouler’ [DRS: 63].

**b. \*ʔabak-** ‘to drive away’: C 5 Dghw *baka*, Wnd *ʔabàkà* ‘to drive away’ [Kr]; E 5a Bid *bàk* ‘bousculer’. Cf. 7 Mbuko *mbakay* (compensatory prefixation) ‘faire sortir’.

//Sem Akk *abāku* ‘to send (away), lead (animals), bring along, drive away’ [CAD a: 3].

**92. \*bak(w)-** ‘to look for, hunt’: W 3 Krkr *bàku* ‘find, seek out’ [GK]; 5 Plc *mbək* [Cs №713], Bogh *bayon, bak*, Mng *bùk* ‘to look for’ [Cs]; 6 Duw *bàako* ‘to look for’; C 2 Bura *baka* ‘to look for, hunt’ [BIB]; 5 Wnd *báká* ‘to chase’ [FW], Mlg *báka* ‘jagen, Tiere an-, einfangen’; 7 Ould *-būk<sup>w</sup>áy* ‘chercher à’.

**93. \*bVk-** ‘to grill, roast, cook on fire’: W 1 Hs *bábbàkaa* ‘to make a big fire; burn, broil meat’; 3 Bol *bòkku* ‘to burn, roast’ [GAB], Ngm *bàka* ‘to burn, grill, roast, cook in contact with fire’ [NEH], *bok-* ‘to roast meat (on open fire), to burn smth.’ [IbN], Maka *bòkkò* ‘to burn’; 5 Dott *bak* ‘to burn, roast, grill, fry’ [CrD], Jimi *bukáí* ‘burn (of fire)’, Plc *bak* ‘to light fire’, *bayáy* ‘to roast’ [Cs №№763, 764, 876]; 6 Duw *əpko* (devoicing in a cluster), WBade *bàku* ‘to roast, grill directly on fire’, Ngz *bàkú* ‘to burn, roast, grill’; C 2 Klb *bágù* ‘to cook’ [Kr]; 8 Zina *bàk<sup>w</sup>à* ‘to cook sauce’; E 4 Mawa *bəgə-ŋ* ‘griller’, Ubi *bòogin* ‘rôtir’; 5b Jegu *biik* ‘to roast’, Tor *bìkuk*, Mubi *bàgé* ‘rôtir, griller’ [JgM] (voicing by assim. with the initial).

Derived noun: C 7 Mbuko *mbak* ‘cuisine’. [Jglb *\*bk* ‘roast’].

//Som Hamer *baka* ‘to cook’, Galila, Dime *baak*, Hamer *bak* ‘fireplace’ [BnA].

Cf. C 7 Baka *vàkay* ‘brûler’ [BAS], Mol *vakay* ‘burn’ [FsM], Zlg *váká* ‘griller’; 6 Daba *vék<sup>w</sup>* ‘chaud’. Possibly, < *\*ʔVbak-* ‘brûler, to burn totally’.

**94. \*buk- ‘to decay, ferment’:** C 2 Bura *buka* ‘to decay’ [BIB].  
Deriv. in *-t-*: W 6 Duw *bùk-čùwo* (< *buk-tu*) ‘to become fermented, sour (esp. grain)’, GBade *buk-tâ* ‘carrion’; C 2 Bura *buk-ta* ‘to cause a thing to decay’ [BIB].

//Sem Amh *bokkâ* ‘fermenter’ [DRS: 64], HECush *\*bok-ees-* ‘to ferment’ > Had, Kamb, Sid (< Amh?).

**95. \*bVk(k)- ‘to cultivate’:** W 2 Goem *bək* ‘to hoe a piece of ground’ (apud [TAS: 14]); 3 Tng *buke* (Ch *\*-k-* > *-g-*, Ch *\*-kk-* and *\*-k-* yield *-k-*) ‘to till fields (last time before harvest)’; C 7 Mol *bokay* ‘to cultivate 2<sup>nd</sup> time’ [FsM].

//Berb Wrgl *bukk* ‘s’effondrer dans un trou, se creuser; tourner, renverser la terre’ [NZ: 47], ECush Oromo *bakkee* ‘field’ [Grg]. Cf. Ometo *\*bok-* ‘to dig; sow’ [BnO: 141].

**96. \*bVk- ‘to bend’:** W 5 Zaar *bok* ‘to be bow-legged’ [CrZ]; C 5 Pod *baka* ‘to bend over’.

Derived noun: *\*(m)bak-* ‘a bow’: W 1 Hs *bàakaa*; 2 Mghw *mbùká* ‘bow’ [BIM]; 5 (< Hausa) Saya *bakaa* [Cs], Guus *bàkà* [CrG]; 6 Ngz *àbák* ‘hunting bow’, Duw *bak*; C 6 Daba *bāk*, Musgoi *bak* [JgIb]; E 1 Kwn *bākáy*, *bàgây* [JgIb] ‘bow’. Cf. C 7 Merey *bè-mbèk* ‘faucile’.  
Deriv. in *m-* ‘to be bent, curled’: C 10 Azum *mboka* ‘to be curled’ [JgIb *bk-* ‘a bow’].

**97. \*bVk- ‘to anger’:** W 5 Zaar *mbok* ‘be angry’ (Refl.) [CrZ]; E 1 Mobu *bágáy* ‘être fâché’, Ngam *bàgàye* (*-g-* < *\*-k-* is regular) ‘se fâcher’. Cf. 5a Bid *bókòr* ‘se fâcher’.

Derived noun *\*bak-* ‘anger, bitter(ness)’: C 10 Dzpw *bàk* ‘amer, colère’; E 2 Kera *bàbàgì* ‘bitter’.

**98. \*buk- ‘hut’:** W 1 Hs *búkkà* ‘a hut made of stalks or grass’ (> 3 Maka *búkkà*); 2 Ngas *puk* ‘a rough hut made of grass’ [Fl], Goem *puk* ‘any temporary hut or shelter’ [Hlw] (regress. devoicing of the initial), note Grk *buk* ‘house?’ [BIY]; 7 DB *púk* ‘grass hut’ < W 2 [RC]; C 7a Skn *buk* ‘council room’.

For WCh < AA *\*buk* ‘reed, straw’ see [TN №88].

//Berb Ahag *abuk* ‘petite tente’, Ayr *ebuk* ‘case misérable’ [NZ: 47]. A Chadic loan?

The following isogloss is probably cognate:

a. W 6 Ngz *bákâ* = *bágâ* ‘shelter made of vertical poles with cornstalks or mats over the top’//ECush dull Tsam *babko* ‘nest’ [ATO].

b. Possibly cognate with the next root (similar linkings of ‘hut’-‘shelter’-‘cover’ occur quite often in Chadic languages)

b.\**bVk-* ‘a cover’: W 3 Bol *bàakè* ‘type of woven tray’ [GAB]; 6 Duw *bùko* ‘clay pot cover’; C 3 FK *bàkà* ‘scabbard, sheath’; 10 Dzpw *bòk* ‘carapace’, Masa *būka-d* ‘cache-sex f.’ [CC].

Derived verbs: W 4 Paa *bakù-sù* ‘envelop’.

C 6 Daba *mbūk* ‘(se) couvrir’; cf. Mafa *mbók<sup>v</sup>*- idf. ‘plaquer sur’

**99. \**bVk(Vw)-* ‘be without, be empty’:** W 6 Ngz *bùukú* ‘to lack, be without’; C 6 Buwal *bòk<sup>w</sup>* ‘to empty out’; 7 Mol *bokay* ‘be bald’ [FsM]. //Sem Geez *bkk*, *bakka* ‘vanish, disappear, become void; useless’, *bky* ‘vanish’ Tna *bäkki* ‘just so, useless’, Amh *bäkkäkä* ‘be destroyed, useless’ [LsG: 94], Cush Saho *booka* ‘bald person’ [Vr], Afar *baka* Saho id. ‘die Glatze’, Afar *baka-s*, Saho id. ‘ausreissen, kahl machen’ [RA].

The next three isoglosses may follow one and the same AA root

\**bqq*/\**bqw*, \**wbq* (metath.) ‘to be empty, to perish’ (a root variant of \**bVkk*/\**bkw*).

a. C 7 Muy *ábák* ‘to leave (uncultivated)’//Sem Hbr *bqq* nif. ‘be wasted (land, country)’ [KB: 144].

b. C 6 Mina *ábák* ‘to die’ [FrJ] //Cush Ongota *baq-* ‘to die’ [SaT], Sem Arab *wbq* ‘périr’ [BK II: 1477].

c. C 5 Wnd *báaka* ‘nothing’ [FW] //Cush agaw \**bVqw-* ‘empty, bald’ [ApAg: 154].

**100. W \**bak-t-* ‘to winnow’** (derived verb in *-t-*, complete action): W 1 Hs *báakà-čee* ‘to winnow corn to remove bran and chaff with the assistance of circular trays’; 3 Krkr *bàakà-tu* ‘to winnow using a tray’ [GK]; 6 Ngz *bàk-tú* ‘to winnow coarse flour from fine using fai-fai’, WBade *bàk-tu* ‘to winnow with faifai or using large pan’, Duw *bàk-to* ‘to winnow by flipping grain in a tray’.

Cf. 4 Paa *béeki-tù* ‘to fan’ [MS]; 5 Dott *biká-t* ‘to fan’ [CrD].

**101. W \**bVHVk-* ‘to despise, scorn’:** W 2 Ngas *bak* ‘to despise, contemn’ [Fl], *bák* ‘to despise’ [JgN], Goem *bàk* ‘to disregard, despise

smth' [Hlw], Mghw *bák* 'to despise' [BIM]; 3 Kupto *bòkèy* 'to disdain, contempt; to jest', Ngm *bòkò* 'scorn, treat disrespectfully' [NEH], cf. Bol *bowu* (< *bVkw*ⁱ-) 'to despise, scorn' [GAB].

//Sem Aram Syr *b<sup>a</sup>īkā* 'mot honteux, déshonnête' [DRS: 74].

**102. \*bVyVk-** 'to separate': W 5 Zaar *byak* 'to separate' [GrZ]; C 10 Azum *mbeka* 'to be separated' (Refl.).

Derived noun: W 2 Goem *pyàk* 'dividing, fork of a tree' [Hlw].

//Cush Sid, Kamb *beek-* 'divide, distribute' [Hds].

**103. \*[ʔa]-bVk-** 'to seize': C 10 Dari *bōk* 'saisir avec un instrument', Dzpw *bók* 'pincer', Musey *mbekka* (compensatory prefixation) 'saisir' [ShyM]; E 2 Kera *béké* 'pincer'.

For a possible noun deriv. see W 6 Ngz *bákúmək* 'tweezers'.

//Cush Beja *ʔabik* 'nehmen, anfangen, ergreifen' [RBd]. For Beja, Dari and Sem *\*bqq* 'plunder' see [TN №75].

**104. \*HVbVk- > bVk-** 'to attach, sew': W 5 Geji *bák-ti* 'to sew' [Cs №862]; C 10 Dzpwi *bók* 'attacher, lier'. Cf. C 4 Gude (replacing prefixation) *mbakə* 'to patch (clothing)'.

Derived noun: C 7a Skn *ma-buk* 'grass cord (three strands plaited)'.

//Sem Arab *ḥbk* 'tisser bien, lier, serrer' [BK I: 369].

**105. \*(HV)bVk-** 'to throw': W 2 Mghv *bak* 'to throw' [BIM]; C 2 Hld *vàkà* [Kr], Klb *vàkà* [MuK]; 6 Mina *bák* 'to throw' [MGr]; 10 Musey *bukka* 'semer en éparpillant' [ShyM]. Cf. W 3 Bol *bùk*, *mbùk* idf. 'indicates falling or dropping' [GAB].

Deriv.: C 1 Tera *mbuki* 'to throw at' [NmT].

//Sem Soq *hbk* 'lancer en bas', Akk *abaku* 'renverser' [LsS: 140]. Cf. SCush rift Irq *buk* idf. 'sound of smth dropping down' [MQK].

For a root-variant cf. W 1 Hs *búukà* (< *\*bwk*) 'to throw down'; 2 Mghv *bùk* (< *buk*) idf. 'sound of a ripe fruit falling on the ground' [BIM].

**106. \*m-bVk-** 'to knead': W 3 Kupto *mbèktéy* 'to knead, stir with a stick'; C 7 Mofu *-mbámábak<sup>w</sup>* 'mettre en boule (argile), arrondir'; 10 Azum *mbukà* 'to knead (bread, clay)'.

//Sem Arab *bwk* 'former des boules d'argile en la roulant entre les deux mains' [BK I: 180], ECush Burji *bukk-aaw* 'be kneaded', *bukk-ays-* v.

caus. ‘to knead’ [SsB]

For a root variant cf. C *\*bVḵ-* ‘to make lump, ball’: 6 Buwal *bok<sup>w</sup>* ‘to make lump’; 8 Makari *baḵi* go ‘to make a ball of smth’; 9 Mnj *ḅak* ‘boule’.

**107. \*HVbVḵ-** ‘to attack’: W 2 Goem *bok* ‘stir up a fight’ [Hlw]; 5 Jimi *abkakai* ‘to attack’ [Cs №643]; 7 Mbuko (derived noun, compensatory redupl.) *babak* ‘lutte’.  
//Sem Akk *abiktu* (*apiktu*) MB ‘decisive defeat, massacre’ [CAD a: 52].

**108. \*buk-** ‘cow, ox; cattle’: C 5 Gamergu (Mlg) *buk-sánugaa* ‘cow’ [Bn]; E 1 Kera *bèké* coll. ‘Vieh, Reichtum’; 4 Sok (Bedanga) *buuko* ‘ox’ [Bn], Sok *búgoo* ‘Kuh, Rind, Ochse’ (AF *búko*) [Luk], Saba *boko* ‘cow’. Cf. C 7 Mada *bòk<sup>w</sup>* ‘gros morceau de viande’.  
Cf. C 7a Skn *mbukul* ‘yearling heifer’ [DSk].

//Berb Nefusa *byu* ‘veau, calf’ [NZ: 83].

a. E 4 *\*bik-* ‘wild animal, meat (of a wild animal)’: Mawa *bik* ‘viande’, Saba *biki* ‘animal’, Ubi *biigi* ‘viande’, *big-boori* ‘animal sauvage’, Sok *bíkii* ‘Fleisch’, *biika maṅadii* ‘walde Tiere’ [Luk].

**109. \*bVḵ-** ‘shoulder, wing, arm’: W 3 Krkr *bàka* ‘full arm, upper arm, foreleg of animal, wing’ [GK], Tng *bokbók* ‘wing(s), armpit’, Glm (*kà*)*bàgá* ‘shoulder, wing’ [SchB]; 6 Duw *bii-biyòk* ‘arm from wrist to armpit’; C 2 Bura *bubuku* ‘wing’ [BIB], Chb *bìbìkù*, Klb *bàbùgu*, Mrg *babùgu* (dissim.), Hld *būgu* ‘wing’ [Kr]; 3 Bana *bəkəbəkə* ‘aile’, FK *máká* (if < *mbəkə*) ‘wing’; 5a Lmn *bábáki* ‘wing(s)’ [Wff] (cf. Lmn *ḅabuki* ‘wing’ [HmG]); 10 Dzpw *bikè* ‘shoulder’, Musey *bik-ḡa* ‘bras, stylo’ [ShyM], Ham, Mus, Gizey, Lew, Marba *bik*, Masa *bigi* ‘bras’ [LexC], Masa *bagiya* ‘arm’ [Jglb], Azum *bikà* ‘complete arm and hand’, *bigi-dá* ‘the upper arm’; E 4 Sok *bák-t-um* ‘deine Schulter’ [Luk].

**110. \*bawVḵ-/\*bVḵVw-** ‘k of dance’: W 2 Ngas *b<sup>w</sup>ak* ‘dance at dead (king, leopard)’ [FI]; C 5a Hdi *baku* ‘dance during the full moon’, Lmn *bák<sup>w</sup>á* ‘kind of dance’; cf. 7 Ould *-būk<sup>w</sup>áy* ‘caracolier (á cheval)’.  
Denom. verb in *ʔa-*: C 7 Mada *óbbòk<sup>w</sup>ó* ‘faire une danse de combat’.

**111. C \*bVḵ(Vw)-** ‘animal skin’: 7 Mafa *búk<sup>w</sup>áy* ‘peau’, Zlg *bàg<sup>w</sup>a*

‘peau d'animal’; 10 Dari *bōk* ‘leather used as loincloth’, Gizey, Lew, Ham, Marba *bāk* ‘peau de animal’, Musey, Lew, Marba *bāk* ‘cuir’ [LexC], Azum *baka* ‘animal skin’, *babaka* ‘skin (human)’, *bagayana* ‘animal skins’, *baga-hudā*, *baka-hudā* ‘goat skin’, Cf. C 4 Gude *bùkà-rá* ‘men's leather loin cloth’.

Derived verbs ‘to skin’: W 5 Bgh *pwok* (regular devoicing) ([Cs]; E 4 Barein (dial) *bákkó*, *bakko*, *bákkō*.

**112. C \*bVwVk- ‘cheek’:** 4 Bch *bwòkəy* ‘cheeks’ [Kr], Bata *bōāké* ‘cheek’ [JgIb]. Cf. W 6 Ngz *bàakà* ‘edge; off to the side’.

a. cf. C 8 Kus *pagam* (< *\*bakam*) ‘cheek’, Log *mbagam* ‘cheek, jaw’ (with a body-part’ suff.) [AIK, AIL].

//HECush *\*bok'o* ‘cheek’: Gede'o, Burji *bok'o*, Sid *boko* ‘cheek’, *bok'o* ‘full cheek’ [Hds], Burji *bok'-óo* ‘cheek, side, riverbank’ [SsB]. The correspondence of velars (Ch *-k-* vers. Cush *-k'-*) is irregular.

**113. C \*biyak- ‘jackal, fox’:** 5a Lmn *mbikà* ‘jackal’ [Wff]; 7 Gis *biika* ‘Fuchs’, Muy *mbiki* ‘fox’; 10 Gizey *biyàk*, Masa, Ham, Musey, Lew, Marba *bàyàk* ‘renard des sables’ [LexC].

//Cf. Berb Shilh *abayuy*, *bayuy* ‘renard’ [NZ: 82].

**114. \*bVk(k)- ‘big’:** W 3 Krf *bà-bòkkò*, Grm *bókkó* [SchB], Bele *bókkò* ‘big’, Bure *bókkò* ‘big’; C 4 Bata *bakaa* ‘large’ [Bn].

C *\*m-bak-* ‘to increase’ (denom. verb in *m-*): 5 Lmn *mbaka* ‘to increase, add’ [Wff]; 7a Skn *mbák-* [ThS: 68]; 9a Gdf *mbàka* [FrG]. Cf. 3 FK *mbàkášà* ‘to get the major share in s.th.’.

Note *\*bak-* ‘many’: W 4 Wrij *bak<sup>w</sup>ai* [BIS]; C 4 Mwl *bákà* [Kr]. Cf. W 2 Grk *bak-ta* ‘everything’ [Fp].

**115. \*bVHVk- > bVk- ‘hot’:** C 7 Muy *bāk bāk* ‘very hot’, cf. also: W 2 Mpn *búk* ‘hot ashes (one use it to cook olives)’; 3 Ngm *mbuk-dò* ‘hot ashes’ [NEH].

//Sem Arab *bu<sup>w</sup>kūk-at-* ‘chaleur’ [BK I: 143].

**116. \*baḵ- > \*bak- ‘to split, break’:** W 2 Mghw *bàk* ‘to share, divide, split, be cracked’ [BIM], Ngas *bak* ‘to cut with a knife, make a slit’ [FI], *bàk* ‘to cut, incise’ [JgN], Mpn *bāk* (pl.) ‘to separate, crack, chop, split’; 5 Dott *bwák* ‘to carve wood’ [CrD]; 7 Fyer *bàk* ‘spalten, hacken

(Holz, etc.)', Bok, DB *bák*, 'brechen, schneiden', Sha *bàk* 'zerbrechen; schlachten' [JgR], Bok, DB *bák*, Mangar *bəkə*, Sha *bàk*, Mindat *bakán* 'to break, smash (pot)', Bok *bak*, Fyer *bàk*, Monguna *bák*, Mundat *bak yic* 'to split, chop into pieces' [RC] (cf. C 10 Dari idf. *bùk bùk* 'en petits morceaux'); C 5 Dghw *bákà* 'to chop' [JgIb]; C cf. 10 Dzpww *bùk* 'prendre en cassant'.

Derived noun: W 3 Pero *bákù* 'big hammer of a blacksmith'.

Deriv. W 6 Duw *bàkto* 'to crack open, hatch', GBade *bàktu* 'to hatch'.

//Sem Geez *baqawa* 'to separate, split, open, break, cut', *bqq* 'split, break up (clods of earth)', Arab *bqq* 'split' [LsG: 101], Arab *b'q* 'égorger (un chameau)', Aram *bəqa'*, Ug *bq*, Hbr *bāqa'* 'to split' [LsG: 100], ECush Brj *bak'*-, Oromo *bak'-ak'*-, dull *pak'* 'split' [SsB], ECush *\*bak'* 'to crush' [Ss: 48].

For Geez *baqawa* 'separate, split, open', *bəqwat* 'yawning, opening the mouth', Amh *bäqqäqä* 'to gape, be opened' [LsG: 101] see: Ch W 5 Dott *byáak* 'to yawn' [CrD]; C 10 Dzpww *búk* 'ouvrir'; E 4 Barein *\*bákkó* 'to open'.

For Eg *bqy* 'to open' *hapax* see [EDE II: 328].

[AA 2 №94: Sem, Ngas, Mghv, Fyer, Bok, HSED №200].

**117. \*bu(HV)k- > buk- 'to dig':** W 5 Jimi *búkái* 'to dig' [Cs №787]; C 4 Gude *bukə* 'to find hole while digging'. Cf. 7 Mol *babək* idf. 'idea of burying' [FsM].

Derived noun **\*bVHVk- > bVVk-/bVk- 'hole':** W 1 Hs *báakáa* (<\*bHk, while AA *\*bk* > Hs *bk*) 'a hole under the ground'; 3 Ngm *búkò*, Krkr *bukò* 'escape hole of squirrel or other rodent' [NEH, GK]; C 8 Makari *bakasi* 'hole for planting corn' [AIM].

[JgIb *\*bk* 'hole'].

//Sem Arab *b'q* 'creuser (un puits)' [BK I: 143], Om Wolt *bookk-*, Malo *bok-k-*, Dac'e *bookk-*, Zayse *book-*, Ari *book-s-* 'to dig', Kac'ama *bok'* 'to cultivate' [LmW: 316], SCush Dah *bóokku* 'hole', *bukkul-* 'to fill a hole' [TD] cf. W 5 Jimi *bukál* 'pierce a small hole' [Cs №802].

**118. \*bVk- > buk 'to uproot, weed':** W 1 Hs *bábbàkee* (*\*bakbak-* > *babbak-* > *babbak*, *-k-* > *-k-* due to incompatibility of two emphatics) 'to uproot'; 2 Ngas *búk* 'to clear the farm at an early stage' [JgN], Mpn *bōk* 'to weed'. Cf. 7 Ould *bùk<sup>w</sup>* idf. 'arracher, tirer d'un coup'.

a. **\*mbuK- 'to weed, extract':** W 7 Bok *mbuk faláh* 'Unkraut

ausreissen, to weed' [JgR], Karfa *mbûk* 'to weed' (cf. Bok *mbûk* 'to take away') [RC]; C 10 Azum *mbokà* 'to extract'.

//Cush Oromo *bukk'-is-*, Kamb *bukk'-is-* 'pluck', Sid *bukk'-is* 'weed, pluck', Gide'o *bukki-ass* 'harvest' (with Caus suff.), Om Kac'ama *buk'* 'harvest the grain', Wolt *buucc'* 'to pluck, harvest, mow' [LmW: 314], Burji *babak'* 'tear' [SsB]. Sem Tgr *bäk'a* 'écorcher, déchirer' [DRS: 63].

**119. \*bawVḵ- > \*ba/uk- 'to peel, shell (with hands)'**: W 3 Krkr *ḅààḅàku* 'to pare, peel' [GK], Pero *ḅáakò* 'to rub off, scrape'; 5 Zaar *ḅok* 'to peel, shell with hands', Dott *ḅókoo* 'to shell, peel' [CrZ,D], Grnt *ḅ<sup>w</sup>aage* 'to peel' [Cs]; C 10 Dzpw *ḅúk* 'écorcher avec les mains'.

//Sem Geez *baq<sup>w</sup>'a* 'to scratch, tear, scrape, rake' [LsG: 100].

a. For a root variant cf. C 6 Buwal *ḅòk<sup>w</sup>* 'to itch', Mbedam *vivək* (< *bivVk* < *bibVk*) 'cicatrice' [NdP].

//Sem Geez *bak* 'scab, wound' [LsG: 93],

**120. bVḵ- > \*ḅVḵ- < 'to appear'**: W 3 Krkr *ḅika* 'to appear' [GK]; E 5a EDng *ḅòkē* 'apparaître, surgir', Bid *ḅook* 'apparaître, pousser'.

//Cush Kamb *ba(k)ki y-*, Sid *bakk'i iy*, Alaba, Had *bakk'* 'to wake up', Gide'o *bakk'i hiy* 'to wake up, be conscious' [LmW: 316].

For ECh < AA *\*bḵ* 'to shine' see [TN №76].

**121. \*bVḵ- > ḅ/mbVḵ- 'to speak, tell'**: C 10 Gizey, Masa, Musey, Ham, Lew, Marba *ḅák* 'dire, parler'; E 4 Sok *ḅókio* (AF *ḅógbogi*) 'sprechen, reden', *ḅók-ti* 'Sprache' [Luk]. Cf. W 5 Jimi *mbwokai* 'to call' [Cs №694].

**122. W \*ḅVwVḵ- < \*bVwVḵ- 'to rot (of sores)'**: 2 Mghv *ḅwak* 'eitern (Ekzemen), to fester (rashes of the body)' [JgS], *ḅwák* 'pimples or boil developing into sore' [BIM], Mush *ḅwak* 'to swell up; rashes on the body' (apud [TAS:39]); 5 Bogh *ḅuuk* 'rot' [Cs]. Cf. 3 Bol *ḅùḅùk* idf. 'swelling and dispersing' [GAB].

//Sem Akk *baqīqāt* 'pourriture' (?), Aram Jud *b<sup>e</sup>qīqā* 'pourri', Syr *baq*, *bāq*, Mand *baq* 'pourrir' [DRS: 79], Cush agaw *\*bāqw-* 'curds, go sour' [ApAg: 154], Som *baqay* 'be afraid; be curdled', *baqa* 'spoiling of milk, fermentation; fear' [LIS], ECush Had *buk'* 'rot' [SsB: 42], Burji *ḅuuk'* 'to rot (of food)' [Hds].

[AA 2 №98: Sem, Cush, Mghv, HSED №308].  
For a root-variant cf. №94. **\*buk-** ‘to decay, ferment’.

**123. E 5 \*baak-** < Ch **\*baak-** ‘to be afraid’: Bid *bàak*, Kaj *báakì*, Mubi *bàagá* (regular voicing) ‘avoir peur’, Bid *bàakò* MM *bàakò* ‘peur’.

//ECush **\*bak’-** ‘be afraid, run away’: Som *baq-ad-* ‘be afraid’, Burji, Oromo *bak’-ad’-* ‘run away, flee’ [SsB], cf. Sem Tgr *bāqa* (bqy) ‘être en danger, être blessé’ [DRS: 78]. [AA 2 №53].

**124. \*bas-** ‘to count, pay, spend’: W 3 Bol *mbos-*, Gera *mbèsè-mí*, Glm *mbás-àalá*, Krf *mbáši* ‘to count’ [SchV]; 5 Bogh *bis* [Cs №696], Grnt *basi* ‘to count’ [Cs]; C 8 Bud *báahé* (*h* < *\*s* is regular) ‘zählen’, *beháge* ‘bezahlen’ [LkBd], Kus *basi* ‘to count’, Makari *basi* ‘to pay; payment’ [Al]; 10 Musey *bassa* ‘dépenser; la dépense’ [ShyM], Azum *basà* ‘to spend money’; E 2 Lele *bàsi* ‘rater, dépenser, manquer’.  
Derived noun: W 1 Hs *báaši* ‘debt’; 3 Krkr *bàsò* ‘loan’ [GK]; 6 WBade *basá-n* ‘loan’.

//ECush Oromo *buusa* ‘collect (money)’ [Grg]. For possible cognates cf. Sem Arab *bss* ‘expédier, faire des envois de marchandises dans différents endroits’ [BK I: 123], Akk *būšu* from OB on ‘valuables, goods, movable property’ [CAD b: 353]. Semantically not very convincing.

**125. \*bus-** ‘to spend (day, year); period of time (day, year)’: W 3 Bol *būši* ‘daytime period, spending the day’ [GAB], Krf *bùsá* VN ‘to spend the day’ [SchB]; C 9 Mlw *bizi*, Mnj *bizi* ‘passer l’année’, Mnj *bəzaa*, Mbara *bizaa* ‘année’ (regressive voicing); 10 Masa *busá* ‘l’année, saison’ [CC], Musey *basara* ‘an, année; passer la journée, année’ [Sch], Gizey, Masa *bùzà*, Ham *bèzà*, Musey *bàzà*, Marba *bizà* ‘passer l’année, passer la journée’, Lew *bàzà* ‘passer l’année’, *bizà* ‘passer la journée’ [LexC], Guzey *bùs*, Masa *bùzà*, Ham *bèzè*, Musey *bàzà*, Lew *bázá*, Marba *bizà* ‘âge, an-année’ [LexC], Azum *ba/iza-dá* ‘year; living space’.

**126. \*bVs-** ‘to dry up’: W 1 Hs *búušée* ‘to dry (up), become thin, 2. *bùusa* ‘drying up of corn-plants’; C 3 Bana *mbásá* ‘tarir, secher’; Cf. W 7 DB *bas*, Monguna *bás lá* ‘to dry up (in sun)’ [RC].

//Sem Arab *ybs* ‘devenir sec, sécher’ [BK II: 1621], Amh *bäšäbbäšä* ‘être sec, fané’, ECush Som *basay* ‘be burnt to ashes, dry up’ [LIS].

**127. \*bas/c-** ‘to drag, pull (out)’: W 4 Paa *mbasù* ‘to pull out’ [MS]; 6 Ngz *bàazú* (regular voicing) ‘to sweep along ground (gown), drag on ground’; E 5a Mig *báabisò* ‘trainer’.

//Cf. ECush Oromo *baasa* ‘take out, off’ [Grg], Sem Aram *basbes* ‘arracher, déchirer’, Tgr *baš‘aa*, Tny *bas‘e* ‘arracher’ [DRS 72f].

**128. \*bus-** ‘to separate bran’: W 1 Hs *bùusaa* ‘to separate bran from pounding grain’.

Derived noun: W 3 Ngm *bùuzù* ‘bran’ [NEH]; E 5a Bid *bóssà* ‘balle de mil’

//ECush Som *buushe* ‘chaff’ [LIS].

**129. \*bVs-** ‘to stop, end, lessen’: C 3 Bana *bàšì* ‘annuler’; 4 Gude *bwasee* ‘to stop doing’; 7 Muy *ábàs* ‘to stop, lessen’; E 1 Kera *bèsé* ‘sterben, verenden’; E 5a Bid *bèes* ‘diminuer’.

Deriv in *m-*: W 4 Miya *mbàši* ‘to extinguish’ [Sch]; 5 Dott *mbis* ‘to put out (fire, light), switch or divide off’ [CrD]; C 5a Gdf *mbàsà* ‘to finish’ [KimG].

For a possible derived noun cf. E 2 Lele *bisà* ‘gibier mort’ (note Kera ‘to die’).

//Sem Arab *bss* au Pass. ‘être amoindri, aminci’, *bhs* ‘amoindrir, ôter, diminuer’, II ‘diminuer’ [BK I: 123, 90]. For the semantic link between ‘to lessen’ and ‘to stop (> to end)’ see C 7 Muy.

The following forms may be cognate:

C 8 Bud *boohé* (*-h-* < *-s-* is regular) ‘alt’ [LkBd] //Eg *bsw* Med ‘Krankheit?’ [EG I: 476], ECush Som *boos* ‘smth very old and worn out’ [LIS]

**130. E 5 \*ba(wV)s-** ‘to moisten’: 5a Bid *bòos* ‘tremper’, EDng *bóosé* ‘humidifier, mouiller’, Mig *bàasò* ‘mouiller’, 5b MM *bas-kà* ‘mouiller’, Mubi *bàsé* ‘mouiller’, *bèesí-t* ‘mouillé’ [JgM].

**a.\*(m)bus-** ‘to wash, bathe’: W 4 Paa *mbisù* ‘to wash’ [MS], Miya *bəsə* ‘to wash, bathe’, *ábəsə* ‘bathing’ [Sch], Wrj *bəs-* ‘to wash’ [BIS], Siri *bəs-*, Mburku, Tsagu *bus-*, Kar *bəsə*, Jmb *mbəs* ‘to wash’ [SkNB]; C 10 Dzpww *mbis* ‘se baigner, se laver’, Musey *mbussa* ‘laver,

le lavage' [ShyM], Peve *mbis*, Hedè *mbis*, Lame, Zime *mbus* 'to wash' [Shy], Gizey, Masa *mùs*, Ham, Musey, Lew, Marba *mbùs* 'laver (vêtement), baigner', Azum *mbusa* 'to wash'.

//Sem Geez *basbasa* 'be wet, be drenched, decay', Tgr *bäsbäsa* 'become moist', Amh *bäsäbbäsa* 'decay, be wet' > Cush Kemant *bäsbäs* 'be wet' [LsG: 109]. For Geez 'to decay' cf. C 2 Bura *bušira* 'to decay' [BIB].

**b. C 10 \*bis-** 'to rain': Musey *bissa* 'pleuvoir sans cesse' [ShyM].

Derived noun: *\*(?a)bis-* 'rain': Gizey *bàbìs* (compensatory redupl.), Masa, Ham *bis*, Musey *bís*, Lew *'àbís* 'pluie continue' [LexC], Azum *abisa* 'a rain which lasts most of the morning or from 5 until noon'.

//Sem Arab *bss* VII 'couler', *basbas* II 'couler, s'écouler (se dit de l'eau)' [BK I: 123, 124], cf. Berb Ghad *ébbes* 'asperger/semmer à la volée' [NZ: 129]. For cognates of Eg *bsy* 'hervorquellen (Wasser); heraustreten; sich ereignen' see [EDE II: 310-313].

**131. \*bVyVs-** 'to despise': WCh 2 Ngas *byaas* 'to ridicule' [Brq], *byás* 'to despise, ridicule, dislike' [JgN], Mghw *bèes* 'verachten' [JgS], *bèes* 'ingratitude', *bèes pòò* 'contemptuous statement' [BIM] (a loan from Arabic cannot be excluded, differently see in [TN №40]); C 10 Azum *bisà* 'to ignore'.

Deriv. in *-t*: C 2 Bura *buš-ta* 'to despise, to count as nothing' [BIB].

//Sem Arab *bys* (i) 'être hautain et injuste envers les autres; opprimer, tyranniser' [BK I: 183], *'abasa* 'to despise, offend', Geez *'abbasa* 'sin, do wrong, commit a crime, be guilty, offend', Tna *'abbäsä* 'act wrongly', Amh *abbäsä* 'to commit a sin' [LsG: 5f]. For Eth 'to commit a crime, sin' cf. W 1 Hs *báasáasà* 'raiding and plundering', C 2 MrgC *vàsò* (< *abas-*) 'fault'.

**132. \*(m-)bVs-** 'to be bad, ugly' > 'stingy': W 2 *\*bis*: Ngas *bis* 'wickedness, badness, evil' [Fl], *bàs* 'bad, wrong', *bàs* 'stinginess' [JgN], Mghv *bíš* 'be bad, ugly, stingy' [BIM], Mpn *bīs* 'bad, ugly', Mushere *bis* 'badness, ugliness', *bis* 'greedy, stingy' [JgO], Mnt *bis* 'bad' [Fp], Chip *bis* 'evil' [Kr], cf. Goem *pís* 'to become stingy' [Hlw]; 4 Paa *mbàsí* 'ugly' [MS], Miya *mbàsa-kə* 'evil, bad, ugly' [Sch], Paa *basan*, Siri *bəsəmi*, Diri *baasaa*, Miya, Kar *mbasa-kə*, Mburku *mbasoosə*, Tsagu *bašiin* 'ugly, bad' [SkNB]; 5 Guus *vìis* 'bad, ugly' [CrG]; 7 Kul *<sup>m</sup>bùšii* 'schlecht' [JgR], DB *mà fwaš*, Bok *má fwaši* 'bad,

ugly', Mundat, Karfa *má fwaši* 'bad' [RC] (regressive devoicing); C 8 Zina *visa* 'bad, evil' (regressive spirantization of the initial), Makari *abase* 'bad' (apud ISv: 27]).

Denom. in <sup>2</sup>*a-*: <sup>2</sup>*abVs-* > *bVs-* (cf. Geez): W 7 Fyer, Kul *bwiš* 'schlecht werden' [JgR]. Cf. C 8 Makari *base* 'to be bad, be ugly' (probably, < 'become bad, ugly') [AlM]. Note E 2 Tob *básá* 'maudire'.

For W 2 'stingy' cf. W 1 Hs *báašii* 'the first unpleasant odour of anything which is going bad', cf. *buša-buša* 'a person of dirty habits'; 7 Mafa *bišek* 'rôt'.

//Sem *\*b<sup>2</sup>s* 'to be bad, to smell bad': Akk *bīšu* 'malodorous, of bad quality, evil' Bogh, SB [CAD b: 270], OffAram *b<sup>2</sup>yš* 'evil, bad' [HJ: 142], Hbr *b<sup>2</sup>š* 'to stink', Arab *bi<sup>2</sup>sa* 'very bad he is!', Sab *b<sup>2</sup>s<sub>1</sub>* 'harm', Qat *b<sup>2</sup>s<sub>1</sub>* 'harm, damage, misfortune' [KgG: 427], Sab *b<sup>2</sup>s<sub>1</sub>* 'harm, damage, misfortune; malice', v.n. *b<sup>2</sup>s<sub>1</sub>* 'être mauvais, mal' [SD: 25], Geez *bə<sup>2</sup>sa* 'be bad, harmful, irritable', <sup>2</sup>*ab<sup>2</sup>asa*, Caus. (cf. W 7), Tgr *bə<sup>2</sup>sa* 'be angry', Amh *basā* 'get worse', etc., common with Cush Bilin *bīs* 'be angry', Augni *bas* 'be bad' [LsG: 82f]. ECush Som *baas* 'problem, difficulty, evil' [LIS], Sid *busha* 'bad' [Hds], *bush-* 'to become bad' [KS], Oromo *boosessa* 'ugly' [Grg].

[GrL: 301 - Sem, Cush, ngas; AA 2 №111 - Sem, Cush, WCh 1, 2, 4, HSED №160 *\*ba<sup>2</sup>as-* 'be rotten, bad'].

**133. *\*bVs/c-<sup>28</sup>* 'to cut, tattoo':** W 3 Bol *bas-* 'stechen' [LkB]; 5 Zul *bošī* (if not < *\*boti*) [Cs №786] 'to cut off'; E 5a WDng *bèèsè* 'faire une coupure de la peau', EDng *bésé* 'schröpfen' [Ebb], *bésé* 'scarifier, faire une entaille dans la chair, saigner' [Dj].

Derived noun: WDng *béésò* 'cicatrice sur le visage', EDng *béésé* 'la tatouage, la scarification'.

//Cush Hamir *bas-* 'to cut (skin), Einschnitte in die Haut machen; tätowieren' [RCh], Om Kafa *bāš* 'to slaughter', Anfilla *bas* [RK], Berb Ghat *buys*, Ahag *buys* 'être blessé', Ahag *sebbuys*, Ghat *sbuys* 'blesser (faire une plaie)' [NZ: 146].

For Cush and Berb see [AA 2 № 82, HSED №235].

**134. *\*bVs-* 'kind of food made of corn':** W 1 Hs *bāšii* 'food made with wheat'; 4 Paa *bīšī* 'mush' (vowel assm.) [MS]; E 5a EDng *bòsíyó*

---

<sup>28</sup> In all the languages supporting this entry reflexes of AA *\*s* & *\*c* have fallen together as *s*.

‘petit mil entier; bouilli ou cru’.

//Berb Qab *absis* ‘millet’ [NZ: 129], Sem Arab *basīs-at-* ‘farine, pain sec émiétté et délayé d’eau; fromage séché réduit en farine, mêlé de beurre ou d’huile’ [BK I: 124], Cush Bilin *basáû*, Saho *búuša*, Oromo *basó* ‘Speise aus frisch geröstetem Getreide’ [RB], cf. Eg *bs* Nä ‘Art Brot’ [EG I: 476].

[AA 2 №83: Hausa and external cognates].

**135. \*bus-** ‘he-goat’ > **bus-Vr-** ‘big he-goat’ (on *-r-* pl. in AA see [MR]): W 1 Hs *bùnsuruu* (< *n-busuru*, with a suff. of sing.) ‘a full-grown he-goat’; 2 Grk *bùus* ‘he goat’ [JgC]; 3 Ngm *buzuru* ‘male goat’ [SkH: 26], rather a loan from Hausa; 5 Bogh *buus* ‘he goat’ [Jglb]; C 3 Bana *bàs(à)* ‘bouc’; 5 Pod *bišera* ‘grand bouc’.

//Cf. Om Shin *bushaayá* ‘Kleinvieh’, Cush Oromo *bushaa’e* [LmSh]. For an alternative etymology for Grk ‘he goat’ see [TN №116].

**136. \*bVs-** ‘upper part’: W 1 Hs *bisà* ‘above, upon, the top’; C 2 Bura *basi* ‘eaves of a house’ [BIB]; 3 Bana *bàsà* ‘haut du bras’; 6 Daba *bàsā* ‘l’épaule’; E 5a WDng *bis-kìrò* ‘haut de la nuque’.

//Cf. ECush E 3 Som *baso* ‘crown of the head; bald’ [LIS].

**137. \*bus/c-** (sg.), **\*bis/c-** (pl. or coll.) ‘fish’: W 3 Bol *bùsì* ‘catfish’ [GAB]; E 4 Sok *búsi* [Luk], Saba, Mawa *bus* (masc.), Ubi *búuze* [Alio]; 5a Mabire *bis* [HuJ], 5b Jegu *bîš* pl., ‘fish’, *bis-ó* sg. ‘fish’ [JgJ], Brg *bis-ó* ‘poisson’ (-o sg.).

//Eg *bss* ‘Art Fische’ NE [EG I: 477]. [HSED №317].

**138. \*b[a]s/c-** ‘field’: C 10 Dzpw *bàsà* ‘jachère’; E 4 Sok *bosso* ‘Acker’ [Luk].

Deriv. **\*m-bas-** ‘earth’: Gizey *màs*, Ham, Musey *mbás*, Lew, Marba *ʔambás* ‘terre nourricière’ [LexC], cf. Azum *ambassa* ‘the country, town, area’.

Denom. verb in *ʔa-* (Caus): **\*ʔabas-** > **bas-** ‘to farm’: C 7 Ould *-bàs* ‘cultiver’, Mada *ábas* ‘biner, cultiver (les champs)’.

Derived noun: W 3 Bol *baasa* ‘fallow farm’ [GAB], Ngm *baasa* ‘farm reclaimed for planting after having lain fallow’ [NEH].

**139. \*bVs/c-** ‘stomach’: W 2 Ngas *bušan* (pl. in *-ŋ*) ‘the bowels’ [Fl],

*mbùšàṅ* [Kr], *bùšàṅ* [JgN] ‘intestine’; 6 Ngz *bàazi* ‘belly (external area)’, Duw *bàzi* ‘belly, stomach; contence of an animal's stomach’, GBade *bàazi* ‘belly (human, animal)’, WBade *bàazaan* ‘belly’; C 2 Bura *busu* ‘stomach proper’ [BIB]; 4 Gude *bùsá* ‘unidentified internal organ next to intestines’; 7a Skn *mbus* ‘navel’; 9 Mnj *bizim* ‘estomac, panse’.

//Cush Ong *buusa* ‘belly’, Hamer *busa* ‘lower belly’ [FIO].

**140. C\*bVs/c- ‘a cover’:** C 6 Daba *bās* ‘la bāche; case, cover’; 7 Gis *basay* ‘Schurz aus Rinde (für Frauen)’, Merey *bas-kwar* ‘cache-sexe’; 9a Gdr *buse* ‘cloth’ [FrG].

Denom. verb: C 5 Lmn *mbusa* ‘to cover’ [Wff].

//Eg *hbs* Pyr ‘verkleiden, verhüllen’, *hbs* Pyr ‘Kleid, Tuch, Hülle, Decke’ [EG III: 64], Sem Arab *hbs* ‘retenir, arrêter; emprisonner; enveloper et serrer une chose dans une autre’, *hbs-* ‘barrage en pierre ou en bois; couverture, pièce d’étoffe’ [BK I: 367].

**141. E \*bis- ‘mosquito’:** 4 Mawa *bisi*, Ubi *biziyo* (regular voicing); 5a WDng *bisà*, EDng *bisì* coll. Mig *bisè*, Bid *biisa*, 5b Jegu *biisó*, Brg *bisiy-ó* m., Mubi *bīs* f. Cf. C 7 Muy *èmbùžēy* ‘insect’.

**142. \*abis/c- ‘magic item’:** W 3 Krkr *abis* ‘incense for driving off spirits’; C 6 Daba *vèsī* ‘l’écorce qu'en met dans les champs contre les voleur (= fétiche)’; 7 Mofu *vesé* ‘pierre magique’.

a. **\*bawVs/c- ‘kind of spell, charm’:** W 3 Krkr *bàawùso* ‘a charm that makes one invisible’ [GK], Bol *bùusùusu* ‘a spell causing inability to move or speak’ [GAB]; C 2 Bura *bwasim* ‘charm given to a chief’.

b.E 5a Mig *bisìrré* ‘sagesse, possibilité de deviner’, *bisìrì-nčè* ‘devin’.

**143.\*baz- ‘to kill, to fight’:** W 3 Tng *baaze*, pl. *base*, *bapse* ‘to kill and eat small animals (lion)’; C 3 Bana *mbàz(ə)* ‘lutter’; 7 Mada *ábàz* ‘abattre, tuer’ (pl. obj.).

Derived noun: C 2 Bura *buzuza* ‘fighting spirit’ [BIB].

**144. \*baz- ‘to envelop’:** W 4 Wrj *baz-*, Diri *baza*, Kar *bazə*, Tsagu *vəza* ‘to envelop’ [SkNB]; C 7 Mofu *-mbəz-* ‘enveloppeur’.

Derived noun: **\*baz- ‘a cover’:** W 1 Hs *bánzáa* (< *baza-n-*) ‘a leather cover for a saddle’; C 10 *\*bazw- > bažw-*: Dzpw *bázèò*, Musey *bažaw-*

*na* ‘couverture’ [ShyM].

//Sem Arab *bzz* ‘enlever, emporter’ > *bazz-* ‘étoffe, en gén., vêtements, hardes’ [BK I:120], (dial.) *bazz-*, *bəzz* ‘cloth, étoffe’ [Bel 1 №26].

a. For a possible cognate cf. CCh 7 \**abVz-* ‘**roofing straw**’ (as a ‘cover’): Mada *évèž* ‘chaume, paille du toit’, Zlg *váza* ‘paille’, Muy *bízbiz* ‘old roofing straw (on a house)’.

**145. \*H-/m-bVz- > \*bVz-/mbVz-** ‘to drip, flow’: W 6 Ngz *bàziyú* ‘to spray water from mouth’; C 5a Hdi *mbəzay* ‘to drip (liquid)’, 7 Mofu *ḥáḥəz-* ‘soudre, couler en petite quantité’. Cf. 3 Bana *ḥ(i)žì* ‘to drink in small gulps’.

Derived noun: W 4 Wrj *ḥaza-na* ‘overflowing, water overflow’ [BIS].

//Cf. Eg *bzy* MR ‘hervorquellen (vom Wasser, das herauskommt aus seiner Höhle u. ä.)’ [EG I: 474], Berb Qab *bbezbez* ‘être mouillé, trempé’ [NZ: 147].

[HSED №256].

**146. C \*bVz- ‘evil’**: C 3 Bana *bžə* ‘malédiction’; 5 Dghw *bùzà*, Gava *bìzà* ‘evil’ [Kr].

//Sem Arab *bzbz* ‘tourmenter qqn’, *bzw* IV stem ‘faire du mal à qqn’ [BK I: 120, 123], Geez *bazbaza* ‘calumniate, offend, despise’ [LSG: 117], cf. C 4 Gude *mbəzə* ‘to argue, quarrel’.

The next root may cognate (terms for ‘bad’ and ‘spoiled’ are confused in Sakun).

**a. C \*bVz- ‘to spoil’**: C 2 Bura *bzi* ‘to spoil’ [BlB]; 3 Bana *bəžə* ‘sick, ruined, dead’ [Hof]; 7a Skn *bəz*, *bəzan* ‘to spoil’, *bəz* ‘bad, ugly, spoiled’. Cf. 7 Mol *mbəzen* ‘to spoil’ [FrO], ‘to destroy’ [FsM].

//Sem Aram *bzz*, Phn *mbzt* ‘to spoil, to kidnap’ [JH: 149], Hbr *bzz* ‘to spoil’ [KB: 116].

**b. C \*bVz- ‘to spoil’ (intensive stem?)**: 4 Gude *ḥəzə* ‘to make mistake, spoil; be angry’; 5 Pod *ḥəzá* ‘to spoil, destroy; gâter’.

Cf. [HSED № 355].

**147. C \*bVz- ‘to sharpen, rub, polish’**: 3 Bana *mbəžə* ‘lisser, aplanir’; 5 Mlg *bəza* ‘verreiben’; 6 Mbedam *bəz* ‘aiguiser’ [NdP]; 7 Mbuko *bébez* ‘affiler, aiguiser’, Muy *ábəz* ‘to sharpen, rub’, Ould *-bəz* ‘aiguiser’, Mada *ábəz* ‘aiguiser, lisser, polir’,

Derived nouns: 6 Mbedam *bəze-ŋ* ‘claw’ [LMb]; 7 Mada *mè-bèz*

‘pierre á lisser, polir’.

**148. \*bVz- ‘hairy (goat)’:** W 1 Hs *búziúu-bùziúu* ‘very hairy’, *búziúrwáa* ‘long-haired goat or sheep’; 3 Krkr *bàzaa* ‘hairy sheep or goat’ [GK], Ngm *bàzá* ‘hairy goat’ [NEH].

a. **\*buz- ‘beard’** (= ‘hair of...’): W 5 Zaar *bubzàŋ* ‘beard’ [CrZ]; C 4 Gude *mbúžèe-mínà* ‘beard’; 7 Mafa *bozo-ngway* ‘menton, barbe; C 10 Azum *bizei-nà* ‘goat beard’.

**149. \*bVz- ‘(hot) day’:** C 9 Msg *bezaa* ‘Tag’ [LkM], W 6 Bade *àbzà-ku* ‘today’.

Deriv. in *-r-* pl.: W 1 Hs *bázará* ‘the hot season’, 4 Paa *bázara* ‘hottest part of dry season’ (< Hs).

Note also W 3 Tng *baza-k* ‘perspiration, sweat’

//Cf. Eg *bzy* ‘Name eines Sonnengottes’ [EG I: 475].

Cf. [HSED №268].

**150. \*bVz- ‘child, fruit, seed’:** C 7 Mol *babàza* pl., Muy *bàzà* ‘children’, Mofu *bàzey* ‘enfant, fils; petit, jeune; graine, noyau’, *bábàzá* ‘fruit, petit’, Mada *mbòózo* ‘jeune enfant (3-8)’ (note Zlg *bízé* ‘fleurir’); E 6 Mok *búziú* ‘semence’. Cf. 5 Hdi *vàzi’uwa* ‘newborn baby’ (*u’a* ‘breast’).

//Berb Wrgl *tabza* ‘enfants, jeunesse’, MC *bezz* ‘enfanter’, Shilh *bezzi* ‘enfant au berceau, nouveau-né’ [NZ: 147].

Note C 2 MrgC *bzár*, Bura *bzàr* ‘child’ [BIB] and W 4 Jmb, Mburku *vazar* ‘seed’ < sem Arab *bazr-* ‘semences, fils’ [BK I: 121].

**151. \*bV[c]- ‘to press, strike’:** W 2 Mghv *byayas* ‘to destroy, flatten’ (internal *-k-* pl.) [BIM]; 3 Bol *bèèši* ‘beating (drum)’ [GAB]; C 9 Mnj *bizi* ‘presser’, Mlw *bízi* ‘appuyer, masser’ (regular voicing), Mbara *bàs* ‘appuyer’; E 5a EDng *bàasē* ‘giffler’. See footnote 29 (№133).

//Sem *\*bss* (< AA *\*bcc*): Aram *b<sup>e</sup>sas* Mand *bsus*, NHbr *bāsas* ‘fouler aux pieds’ [DRS: 73], Hbr *bws* ‘tread down’ KB: 114] cf. ECush Burji *buus-* ‘to thresh’ [SsB].

**152. \*(HV)bVc- ‘to spit’:** W 2 Ngas *bes, bis* [Fl], *bəs, byás* (pl.) ‘to spit’ [JgN]; 4 Miya *bəcə*, Mburku *vuc-* ‘to spit’ [SkNB]; C 3 FK *vùsà* ‘to spit out’; 4 Gude *vushi* ‘to spit out; be blown in (of rain)’ (*v-<-b-*),

E 3 Sib *básá* ‘to spit’ [JgSib], cf. C 7 Muy *ébišēy* ‘to sneeze’.

**153. \*b[a]ç-** ‘to break, crash; split (to go into pieces)’: W 2 Gmy *bas* ‘to break or cut a piece off’ [Hlw]; 5 Zar *bes* ‘to take a piece off’ [CrZ]; C 2 Mrg *bàcə* ‘break into small pieces’ [HfM: 128]; 4 Gude *búc* ‘hitting with a club, breaking off with force’; 6 Buwal *bac* ‘to crash’; 7 Zlg *bac, bac* ‘tuer; briser, romper, casser’, Mafa *bac-* ‘casser’, Ould *bācáy* ‘se couper en deux’, *-bēcéŋ* ‘couper en deux morceaux’; 10 Azum *basá* ‘to break, collapse, crack (of huts)’, Masa, Mus *bás, bés* ‘couper (fendre)’ [LexC], Mus *bassa* ‘découper la viande ou la peau en lanières’ [ShyM]. Cf. C 7 Mol *mbocoy* ‘to beat lightly’ [FsM].

**a. C \*bVç-** ‘to press, squeeze’: 3 Bana *básá* (-s- < -ç- is regular) ‘presser, extraire beaucoup de liquid’; 5 Pod *bičə* ‘serrer’; 5a Lmn *abica*, Vemgo *bicu* ‘to squeeze’ [HmG], Lmn *bica* ‘to press (through sieve)’ [Wff]; 7 Zlg *buc* ‘masser, pétrir avec la main’, Mafa *mbác-* ‘piétiner’, Muy *ámàc* ‘to crush an object’.

*bVç-* > *ḅVc-* in C 5, 7 by assim. with -ç-. Note Lmn *abica* [HmG] ~ Lmn *bica* [Wff] and Zlg *bac, bac* ‘tuer; briser, casser’. Secondary emphatization (*bVc-* > *ḅVc-*) is not regular, note that in a number of languages two emphatics are not compatible in one word.

/Cf. Sem Arab *bšw* ‘presser (son débiteur en réclamant de lui son dû)’, II ‘rendre eunuque’ > ‘castration’ [BK I: 133].

**154. \*baç-** ‘to insult, be angry’: W 1 Hs *báatsè* ‘be furiously angry, punt with rage’; C 5a Lmn *baca* ‘to insult’ [Wff]; 8 Log *baši-wun* ‘to insult’, *biši* ‘an insult’ [ALL].

Cf. W 1 Hs *bíutsáatsà* ‘an ill-tempered, quarrelsome person’.

//Cf. Sem Arab *bayš-, bīš-* ‘malheur, calamite; confusion, trouble’ [BK I: 183].

**155. \*b[a]ç-** ‘to winnow’: C 8 Makari *boši ho* ‘to winnow’; cf. 5 Lmn *mbaca* ‘to remove, brush off.’

Derived noun: W 1 Hs *báts’èe-bats’ii* ‘remains, dregs (esp. of threshed corn)’.

**156. \*bVç-** ‘to gather, fill’: W 1 Hs *báats’è* ‘to fill to brim’; 5 Guus *mbaacá* ‘to gather, collect’, *mbàči* ‘heap’ [CrG]; C 3 Bana *bàsə* ‘se réunir, rassembler’ (shift of emphasis); 7 Mafa *bič-* ‘rassembler’.

Derived noun: C 3 Bana *bàsə̀v̀à* ‘collection, réunion’; 5 Pod *mbə̀cə̀cə̀* ‘chose nombreuse’, cf. E 2 Lele *bāsē* ‘entassement’.

//Sem Arab *bṣʿ* ‘réunir, ramasser’ [BK I : 132], SCush rift Irq *bats* ‘to store’ [Kies].

**157. \*bVç-** ‘to diminish, weaken’: W 3 Tng *busi* ‘feeble, weak’; 5 Lmn *baca* ‘to diminish’; 7 Cuv *mébèčèy* ‘effriter’; C 10 Dzpw *bàcè* ‘faible’. Cf. W 2 Mpn *bées* ‘not enough’.

//Sem Arab *baʿṣ-* ‘maigreur’, *baʿṣūṣ-* ‘maigre et mince’ [BK I : 142].

**158. \*bVç-** ‘to colour’: W 5 Zaar *mbocá* ‘to paint, decorate (wall)’ [CrZ]; C 3 Zlg *buc (dár)* ‘tacher, faire une tache’.

Deriv. W 1 Hs *báats’á-báats’á* ‘of more than one colour’; 5 Zaar *mbóci-mbóci* idf. ‘variegated’ [CrZ].

//Sem Arab *bawṣ-* ‘couleur’, *būṣ-* ‘couleur, teint’ [BK I: 178]

**159. \*bVç-** ‘to have diarrhoea’: C 3 FK *mbàcə̀* ‘diarrhoea’; E 2 Lele *bùsu* ‘to have diarrhoea’

Deriv. ‘dirtyness’: W 1 Hs *bóotsóo* ‘untidiness; a person guilty of’, *báats’áats’áa* ‘untidy, unpleasant to see’.

//Eg *bss* Subst. (neben ‘Kot’ erwähnt) [EG I: 477], Cush Beja *bus* ‘Schmutz, Kot; dirt, faeces’ [RBd].

Cf. AA *\*bs(s)* ‘to defecate’ [TN №49].

**160. C 7 \*baç-** < Ch *\*baç-* ‘to pour, sprinkle out’: Muy *ábác* ‘to sprinkle water out of bowl using hand’, Mafa *bac-* (+ ‘water’) ‘verser de l'eau pour arroser’

//Sem Akk *baṣāṣu* lex ‘to trickle’ [CAD b: 134], Arab *bṣṣ, bṣʿ* ‘couler, suinter’ [BK:131f], Berb Shilh *bizzi* ‘jaillir’ [NZ: 155].

**161. \*HVbuç-** ‘stick, iron bar’: W 5 *\*mbuç-* (compensatory prefixation): Zaar *mbúcu* ‘flail’, Guus *mbùuc* ‘stick, walking stick’ [CrZ, CrG]; C 5 Lmn *búca* ‘iron bar’ [Wff]; 7 Mafa *búcáy* ‘barre de fer qui servant à payer la dot autrefois’.

//Sem Ug *ʿbṣ* ‘mace’ [DUL: 142].

**162. C \*biç-** ‘to cut-in-two; to tattoo, saw’: 5 Mlg *báca* (ts) ‘Holz sägen; to saw wood’; 9 Mnj *bisi*, Mlw *bísi* ‘déchirer, couper en deux’;

10 Gizey, Lew *bis* ‘inciser, tatouer’ [LexC], Musey *bissa* ‘marquer; *bis iira* ‘balafrer’ [ShyM]. Note \**bič-* > *bis-* (shift of emphatization) in C 9-10.

//HEC \**boc-* ‘carve’: Sid, Gede’o \**boc-* ‘to split wood’, Burji *boc-* ‘to carve’ [Hds].

**163. \**ba[č]-* ‘to sting, shoot’:** W 3 Bol *bàsaa* ‘to sting, shoot, kick’ [GAB], Krkr *bàsaa* ‘to shoot’, *ba bàsaa* ‘hunter’ [GK], Maka *bòosáayò* ‘to shoot’, Ngm *basâ* ‘to shoot, sting (by bee, scorpion, etc.)’ [NEH], Bure *bis-* ‘to sting, shoot’, Dera *bòi, bùi* ‘to shoot, blow (horn)’ [NmK], Bele *bàahú-kò* ‘to shoot’ [SchB]; 5 Grnt *busi* ‘to shoot’ [Cs]; 7 Sha *báč*, Mundat *bač* ‘to shoot’ [JgR, RC], Mundat *báč* ‘to sting (bee, ant, scorpion)’ [RC].

Derived verb in *-k-* (pl.?) W 7 Karfa *bušuk* ‘to shoot’ Monguna *basik* ‘to shoot’ [RC], Richa *bisiky* ‘to shoot (an arrow)’ [JgR],

Derived noun: W 7 Sha *báčàw* ‘arrow’ [JgR]; C 3 Bana *bàs-kʷà* ‘flèche jouet d'enfant’.

Cf. W 3 Bol *bèšì* ‘attaching with a nail’ (for the same semantic link see W 2 Ngas *pwas* (pl.) ‘to shoot, to nail’ [JgN], note also W 5 Guus *mbiis* ‘claw, nail’ [CrG]).

**164. \*(*m*)*bVč-* ‘to harm, to bewitch’:** C 5 Pod *mbeče* ‘exécuter en rite’; 7 Mada *ámàčà* ‘combiner, fabricer, ensorceler’; E 5a Bid *bùč* ‘hair, injurer’.

//Sem Ug *bty* ‘evildoer, wizard’ [DUL: 250]. Ug *t* < Sem \**t* < AA \**č*.

**165. \**buči* ‘flower’:** W 5 Jimi *buusáa* [Cs], cf. Bgh *busu-ŋki* [Cs], Dott *busu-lti* ‘flower’ [CrD]; E 4 Saba *bisi*, Mawa *bisu* [RbM], *pisu* [HuJ] Barein (dial.) *bèssó, bessó*; E a Bid (dial.) *božo* [HuJ], 5b Jegu *buč*, pl. *boče*, Brg *bòoči* pl. ‘flower’.

Cf. W 3 Bol *bèšì* ‘coloring the teeth with tobacco-flower’ [GAB].

E 5a Jegu and Birgit forms (newly found and lacking in [CED №26]) point to PCh *-č-*.

//PEC \**bis-* ‘color, flower’: Burji *bíš-a* ‘color’, Afar *bis-u*, Oromo *bif-u* ‘color’, Konso *pis-a* ‘flower’, dull Harso, Dobasse *pisakko*, Goll *pisó*, Gaw *pisko* ‘flower’ [SsB, AMS], Ong *bisku* [ArTsO].

**166. \**bVž-* ‘to dig’:** C 4 Gude *bažə* ‘to dig up (with chopping action of hoe)’; 7 Mofu *-báž-h-* ‘(se) creuser’.

Deriv. C 7 Mol *bažakay* 'to dig shallow' [FsM].

Derived noun: W *\*biž-* 'grave': 4 Paa *bižá* [MS]; 5 Guus *bišù* [CrG].

**167. \*bVž-** 'sprout, blossom': W 1 Hs *bàžee* 'the blossom of the locust-bean tree'; C 7 Mada *bižè* 'rejeton, repousse', Ould *bāzā* 'petit fruit de gombo de fin de saison; rejet de feuilles de haricot, regain, rejeton ou enfant de vieux (fils)'.  
//Cf. Eg *bzy* MR 'herausstreten' (von Pflanzen, die aus dem Acker hervorkommen), to sprout' [EG I: 474].

**168. \*bVł-** 'to dig, bury': W 1 Hs *bíšè* 'to bury'; 6 WBade *àbɔu* (< *bàtú*) 'to dig small hole', Ngz *bàɔú* (regular regress. voicing), cf. Duw *àptó* (devoicing in a cluster) 'to dig'; C 2 Bura *bɔa* (voicing in contact) 'to bury' [Kr], Bura *bwala* 'to plant in hard ground without rain', *bwalaha* 'to plant a patch of hard ground' [BIB].

Deriv. in *-n-*: W 1 Hs *binnè* (*binna*, *bisna*, *bizna*) 'to bury person or thing; fill in hole'; 3 Krkr *bisnu* 'to plant, sow' [GK] (< Hs?)

//Sem Arab *nbš* (u) 'déterer, creuser' [BK II: 1184], Cush Burji *boosa* 'grave' [SsB], Beja *bis* 'begraben' [RBd]. Note Arab *nbš* vers. Hs *bisna*.

Cf. [HSED №365].

**169. \*bat-, \*HVbat-** 'to press, crush, break into pieces': W 5 Zaar *mbat* 'to press down' [CrZ]; C 1 1 Tera *bəti* 'to hit with hand' [NmT]; 2 Klb *bɔà* 'break' (voicing in contact) [MuK], 4 cf. Gude *bwa'atə* 'to bend edge of tool by striking smth hard'; 5 Pod *báta* 'to castrate'; 7 Mofu *-bət-* 'fractionner, casser (pierre), partager', Mada *ábbət* 'piler, cogner, écraser, casser (noyau)', Mbuko *bébat* 'broyer', Zlg *babat* 'broyer, concasser', Muy *ábət* 'crush into pieces'; E 5a Mig *bàacò* 'cogner' (< *\*bHt*, *\*Hbt*, cf. forms with compensatory redupl. – *b-b-t* < *\*Hbt* - in C 7).

**170. W 5 \*mbVł-** 'egg': Zaar *mbú:t* [Cr], Plc *mbwat*, Zul *mbute*, Mng *mboł*, Tala *buł* [Cs] Guus *mbòot*, Dott *mboł* [Cr], Dyarim *bɔlə*. Note *m-* as a suff. of sing.

Denom. verb in *ʔa-*: W *\*ʔa-bàt-* > *ɓabat-* (compensatory redupl.) 'to hatch': 3 Krkr *bàabàtu* [GK]; 6 Ngz *bàbhú* 'to hatch out of egg'.

//Sem Arab *byd* 'surpasser qqn en blancheur, en éclat', II 'blanchir',

*bayd-at* ‘oeuf’ [BK I: 183f], Hbr *bēṣā*, Jib *beṣ* Mhr *bēṣayt* ‘egg’, Geez *byṣ* ‘become white, yellow’ [LsG: 116].  
[HSED №354].

**171. C 10 \**m-but-* ‘bull’, \*(*m*)*but-ta* ‘cow’:** Musey *mbut-na* ‘taureau, vache’, Ham *mbùt bòlò*, Lew *ʔàmbùt*, Marba *ʔàmùt* ‘taureau, bovin’, Ham, Musey *bùt-tà*, Lew *ʔàmbùt-tà*, Marba *ʔàmùt-tà* ‘vache’ [LexC].  
//SCush rift *\*batlay* n. coll. ‘young domestic animal’: Irq *batlay* ‘young cows’, Gor *bathay* ‘young sheep and goats’ [Kies].

**172. \**bat-*/\**bVHVt-* > \**bat-* < ‘to break, snap’:** W 5 Guus *batá* ‘to snap (a thread)’ [CrG]; 4 Paa *batù* ‘to break, snap’ [MS]; C 5 Pod *batá* idf. ‘casser’; 6 Mina *bét* ‘to break’ [FJ]; 7 Mofu *-bát-* ‘percuter, casser (un os) en tapant avec une pierre, projeter à terre’, Chuv *mébèlèy* ‘briser, casser’.  
//Sem Arab *bʿd* ‘partager, diviser’ > ‘portion’ [BK I: 142f].  
Common origin with the next root can not be excluded.

**173. \**bVt-* > \**ḅVt-* ‘to bump, forge’:** C 5 Pod *bité*; 6 Gavar *ḅət*, Buwal *ḅàt* ‘to forge’, Daba *ḅit* ‘forger’, mà *ḅit* ‘le forgeron’ [Lnh: 9], Mina *ḅəḅ-* ‘to smith’ [FrJ]; E 5a Bid *bādý* (< \**bVt-*/\**bVč-*) ‘boxer’.  
//Cf. Sem Arab *nbḏ* ‘battre, être en pulsation (se dit de pouls)’ [BK II: 1184].

**174. C \**bat-* > *ḅát-* < ‘to sprinkle, moisten’:** 3 FK *ḅàḅàḅà* ‘to moisten, make wet’, Bana *ḅáḅí* ‘arroser’; 6 Buwal *ḅəḅət* ‘to sprinkle’  
//Sem Arab *bḏḏ* ‘couler, suinter’ [BK I: 133], *nbḏ* ‘couler’ [BK II: 1184].  
For a root variant cf. C 7 Muy *ḅàḅàḅ* ‘pouring’ and Sem Arab magh. Dial. *bašbaš* ‘suinter (eau)’, Soq *bašah* ‘couler’ [DRS: 88].

**175. W *bVt-* > \**ḅVt-* ‘soot, ashes’:** W 2 Mpn *bis* ‘soot’, Gmy *bis* ‘charcoal’ [Hlw], Kofyar *bis* ‘soot’ (apud [TAS: 34]); 3 Maka *bùtló* ‘ashes’ [SvM]; 5 Zaar *ḅitâr* (pl. in *-r-*) ‘ashes’ [CrZ]  
//Cf. Sem Arab *ʔabīḏ-* (Afr.) *par antiphrase* ‘charbon’ [BK I: 184].

**176. \**bVt-* ‘beer’:** W 1 Hs *béetsò* ‘native beer’; 6 Ngz *ḅáḅa* ‘fermented guinea corn used for beer’.

C \**ḡVṭ*- < \**bVṭ*?- ‘to fermenter (beer), to decay’: 5 Pod *biṭé* ‘gâter’; 7 Mafa *bát*- ‘fermenter (bière)’, Mofu *-mbət*-, Chuv *mébàtèy* ‘fermenter’ Ould *-ḡàt* ‘cailler, se décomposer, moisir, pourrir’.  
//Sem Arab *bwd-at*- ‘bouza, espèce de boisson fermentée’ [BK I: 178].

177. \*(*ba*)*baḡ*- ‘to clean the field before sowing’: C 6 Mbedam *baḡ* ‘défricher’ [NdP]; 7 Mofu *-baḡ*- ‘défricher, débroussailler’, Mafa *báḡa* ‘écobuer, déchaumer’, Mbuko *bébaḡ* ‘netoyer le champ avant de semer’, Zlg *bàbàḡ* ‘préparer le champ avant de semer’; E 5a Bid *bol* ‘débroussailler’.

178. \**bVḡ*- ‘to break, ruin, forge’: W 1 cf. Hs *báḡè* (*bazū*) ‘to demolish’; C 2 Mrg *bḡǎ* [HfM: 28] ‘to forge’, Bura *bḡa/i* ‘to do blacksmithing’, deriv. *bḡiha* ‘to re-forged a tool’, *bḡimta* ‘to forge a tool’ [BIB]; 5 Pod *báḡa* ‘to push’; 7 Mafa *baḡ*- ‘briser’, Mofu *-báḡ* ‘(s’) écrouler, (se) détruire’, Ould *bàḡàm* ‘bousculer’.

Deriv. in *-t*-.: W 3 Kupto *bàl-téy* ‘to press’; C 7 Mada *ábḡát* ‘être aplati’.

Deriv. in *m*-.: C 7 Mofu *-mbàḡ*- ‘frapper du pied’, Ould *-mbàḡàḡ* ‘fouetter’, Mol *mbaḡ* ‘to demolish’ [FsM], Mbuko *mbaḡ* ‘s’effondrer (maison, mur)’, Zlg *mbáḡá* ‘(s’) écrouler’.

Derived noun: C 6 Daba *mbàḡà* ‘forgeron’ [Lnhr: 84].

//Cf. Sem Arab *nbš* ‘frapper qqn’ [BK II: 1381].

a. C \**ḡVḡ*- ‘to hit, to ruin’: 1 Tera *ḡaḡi* ‘to forge’ [NmT]; 3 Bana *ḡ(à)ḡi* ‘taper avec un baton’; 7 Mofu *-ḡaḡ*- ‘se fendre (sol. mur; par le froid), se fissurer’; 9a Gdr *ḡáḡ* ‘to collapse’ [FrG].

The next issue may cognate.

179. C \**baḡ*- ‘to kill’: 2 MrgC *bḡàḡà* ‘to kill (many)’; 3 FK *bàḡà* ‘to kill in mass, destroy’; 7 Merey *bàbàḡ* ‘exterminer’, Muy *ábàḡ* ‘to kill’ (pl. object), *bàḡàbàḡà* ‘violence’, cf. *bāḡāc* idf. ‘wounding’, Mafa *baḡ*- ‘être décimé, mourir en grande nombre’; E 5a Cf. Bid *belbèl* ‘tuer des criquets avec des chiffons’.

180. \**bVḡ*- ‘to build’ > ‘granary, cabin’: C 7 Ould *-bàḡ* ‘construire, bâtir une case’; Mada *mbéḡḡe* ‘mur de separation, compartiment’; 5 Pod *búḡe* ‘small granary’; 7a Skn *mbaḡi* ‘granary in loft’; E 2 Lele *mbóló* ‘corn-bin’ [JgIb].

a. **\*bVġ-** ‘enclosure, cage’: 6 Buwal *bēġē* ‘animal enclosure’; 7 Mada *émbèġ* ‘piège’, *ámabāġ-wàr* ‘piège avec bûche’, Mafa *mboġor* ‘nasse a souris’.

Denom. verb in **\*<sup>?</sup>a-/m-**: C 6 Buwal *bèġ* ‘to fence’; 7 Chv *mébàġèy* ‘fermer’, Mbuko *mbāġ* ‘piéger’.

Derived verb in *-t-* (complete action): W 3 Bol *bàl-tu* ‘to lock’ [GAB].

**181. \*(m)bVġ-** ‘to turn (over)’: 6 Daba *mbàġàk* ‘retourner’; 7 Ould - *bāġày* ‘rouler à terre’, Muy *émbiġimēy* ‘to seek smth turning things over’, Mafa *bāġam* ‘renverser un objet placé trop haut’; E 2 Tob *bálé* ‘renverser’ (Ch **\*ġ** regularly > ECh **\*l**).

//Sem Arab *bʿš* ‘renverser, jeter qqn par terre ; se défendre, repousser’ [BK I: 80].

**182. \*bi/al-** ‘to cut (down a tree), to chop’<sup>29</sup>: W 5 Saya (Zaar) *bál* ‘to split, make incision’ [Cs №825]; C 6 Buwal *bàl* ‘to cut down (tree)’, Mina *bál* ‘to cut’ [FrJ: 123]; 9 Mlw *bíli* ‘couper, abattre’, Mnj *bili* ‘couper à la hache’, Msg *baláñ, bala* ‘fällen, schlagen’ [LkM]; 9a Gdr *bál* ‘to cut with a machete’ [FrG]; 10 Gizey *bàlàw* ‘séparer, couper’ [LexC]; E 4 Barein *\*billo* ‘to chop’.

Derived noun: E 5a Mig *bòolâ* ‘hache’. Cf. W 1 Hs *bàlbee-tà* ‘a tattooing scalpel’

Derived noun: C **\*bal-** ‘piece’: 3 Bana *b(à)là* ‘morceau’; 8 Makari *bala* ‘piece, half’ [AIM].

Derived noun **\*(m-)bVl-** ‘scar, wound’: W 3 Bol *bòlè* [GAB], Krkr *bàlè-d* [GK] ‘scar’; 5 Zaar *mbelle* ‘tribal scars’ [CrZ]; 6 W Bade *baalon* ‘scar’; C 6 Buwal *mbàlàx* ‘wound, sore’, Daba *mbàlāh*, Mbedam *mbalah* ‘plaie’ [NdM]; 7 Mafa *balay* ‘plaie à la tête’, Baka *ambàlà-k* ‘plaie’ [BAS].

//Cf. Eg *wbnw* [if wbl] ‘Wunde am menschlichen Körper’ Med [EG I: 294].

a. **bal-** < **\*HVbal-** > ‘to cut in pieces’: W 4 Miya *bal* ‘to chop’ (also ‘to break rope’) [Sch]; C cf. 6 Mina *bál* ‘to cut’ [FrJ: 397], note *bál* id.; 7 Mbuko *bál* ‘cut in two’; E 5a EDng *bàlō* ‘couper (pour faire une lanière)’.

Cf. W 2 Goem *bál* ‘flute or whistle carved of wood’ [Hlw].

//Sem Arab *bl* ‘couper, retrancher’ [BK II: 158-9].

<sup>29</sup> May be cognate with №183. **\*bal(l)-** ‘to break (off)’.

The following root is probably cognate:

b. W **\*ḡVI-** (< **\*Hbl**) ‘to etch, tattoo > to write, design’: Tng *balle*, Pero *bállò*, Dera *bùlí* ‘to write’ [NmK], Bol *billu* ‘to trace, design, etch’ [GAB], Kupto *billéy* ‘to draw, write, make tattoo(s)’; C 1 Tera *bəla* ‘to write’ [NmT].

Derived noun: W 1 Hs *bállíyáa* ‘ornamental saddle-cloth’; 2 Goem *bóol* ‘scar, tattoo’ [Hlw].

//SCush Dah *bil-* ‘to decorate’ [EEN]. Cf. Sem Akk *\*biblu* (a type of tablet and text) SB pl. only [CAS b: 222].

Cf. [TN №267].

**183. \*bal(l)- ‘to break (off)’**: W 3 Bol *bàllu* ‘break a piece off; remove bark from a tree’ [GAB], Tng *beli* ‘to break (stick), pinch’; C 2 Bura *bəli* ‘to break (such things as wood, etc.)’ [BIB]; 5a Hdi *balay* ‘to break, casser’; 6 Buwal *b<sup>o</sup>lax* ‘to break off’.

Derived nouns: C 5a Hdi *bala-ku* ‘broken bone’; 9 Mnj *abaalan* ‘tesson’.

//Cf. Cush Afar *bal*, Saho id. ‘teilen’ [RA], cf. Sem Geez *bl* ‘spoil, ruin, destroy, mix’ [LsG: 96].

a. **\*bal-** (< **\*bhl** or Intensive stem) ‘to break (in pieces), to smash, to separate’: W 1 Hs *bállè* ‘to snap (bone, stick)’; 3 Kupto *béléy* ‘to break, fracture; to prick’, Bol *holu* intr. ‘break (of stick, etc.)’, plurac. *bòllu*, *bògìlu* (< **\*b-k-l**, internal **-k-** pl.) ‘to break up, into pieces’ [GAB], Krf *bàyàléy* (internal **-k-** pl.) ‘to break (stick)’ [Stl], Pero *belò* ‘to break wood, crack’, Maka *bòláayò* ‘to break (stick)’; 4 Miya *bal* ‘to break rope’ (also ‘to chop’) [Sch]; 5 Dott *bóli* ‘to divide, separate’, Guus *bəl* ‘to separate’ [CrD, G]; 7 Fyer *baal* ‘to break (stick)’ [JgIb]; C 2 Klb *bəlà* [MuK], Mrg *bəl* ‘to break’ [HfM: 23], Bura *bəlà* ‘to break (stick)’ [BIB]; 3 FK *bəl* ‘to break’, Bana *b(ə)li* ‘casser’, *báli* ‘briser beaucoup’; 5a Hitk *bal-* ‘abbrechen, to break off’, Lmn *bala* ‘to break, ruin’ [Wff], Hdi *bəlay* ‘to break, smash; briser’; 7 Zlg *bál* ‘être cassé en deux’, Mada *abal* ‘séparer, enlever’; 10 Dari *būl* ‘partager’, Dzpw *būl* ‘séparer’; E 3 Smr *bwālā* ‘casser’ [JgSib].

Derived noun: W 3 Bol *bòlò* ‘fracture, break’ [GAB].

Deriv. in **-t/-k-**: W 3 Bol *bòl-tu* ‘to break a stick or other object that snaps in two’ [GAB], Ngm *bal-kô* ‘to break stick, break in-two’ [NEH]; C 10 Azum *bila-ka* ‘to destroy, ruin, spoil, defile’.

Cf. C 7 Muy *mbəlat* ‘to divide’

**184. \*b[a]ll-/\*bVbVI- ‘to bend, curve, encircle’:** W 1 Hs *balaaloo* ‘to wriggle (of a snake)’; 3 Kupto *bèlléy* ‘to bend smth.’, Dera *báli* ‘to encircle, go around’ [NmK]; C 2 Bura *mbala* ‘to turn, curve’, *mbali* ‘to bend’ [BIB]; 7 Ould *-bàlây* ‘se rouler’, Mada *óbbòl* ‘faire rouler (une pierre)’; E 1 Ngam *bibile*, Mobu *bábálé* ‘rouler à terre (cheval)’.  
Derived verbs: W 3 Kupto *bàl-téy* ‘to bend’; C 7 Mafa *áblà-k* ‘faire tourner en rond’, *bàla-d-* ‘écarter, écarteler’; 8 Makari *mbil-ka* ‘to roll around’.

//Cf. Berb Ayr *ebel* ‘entourer de tous côtés, ourler’ [NZ: 55].

Cf. TN №260 (includes Dera and Mada forms).

**185. \*b[u]ll- ‘to dig’:** W 3 Ngm *bùlá* [NEH], Bol *bùlaa* ‘to dig out’, *bùllaa* (plurac.) ‘to scoop out (tuwo, earth)’ [GAB]; C 9 Msg *bol(a)* ‘hacken, graben’ [LkM]; E 5 Bid *balbàl* ‘creuser les fourmilières pendant la famine’. Cf. E 5a EDng *bòl-tō* ‘gratter la terre’.

Derived noun: **\*bVI- ‘well’:** C 8 Affade *blə*, Ngala *pəlii* [Sol], Makari *bile* Kus *fley*, Log *fili*<sup>30</sup> [Al]; E 3 Ndam *bāl* [Jg], Tum *bal* ‘well’, Smr *béllali* ‘kurzer Brunnen’ [Luk]. Cf. W 3 Maka *bùlá-gàži* ‘well’ [SvP].  
Deriv. in *m-* ‘to bury’: W 3 Kupto *mbàaléy* ‘to bury, cover with sand’, Krkr *mbilmu*, *mbùlmu* [GK], Bol *mbàlu* ‘to bury’ [GAB], Glm *mbil-àalá* ‘to dig out’ [SchB].

Derived noun: W 3 Bol *mbàlù*, Ngm *mbèelù* ‘burial’ [NEH]; C 6 Buwal *bal* ‘funeral’.

//Sem Sab *blw* ‘construct a tomb’, *blyt* ‘tomb’ [SD: 29], *bly* ‘élever une sépulture’, *blwt* ‘tombe’ [DRS: 66], Aram Hatra *bly* ‘designation of a (certain type of) tomb’ [HJ: 166].

a. The following forms: W 5 Zaar *bal* ‘to dig’ [CrZ]; E 3 Tum *bàl* ‘creuser; évaser’, *bàl* ‘pit’ < Ch **\*bHI** may be cognate with Sem Sab *b<sup>l</sup>* ‘work, excavate bedrock’ [SD: 26] < Sem *\*b<sup>l</sup>* ‘to make, work’: Ug, Hbr, Phn *b<sup>l</sup>* ‘to make, prepare’, Pun *b<sup>l</sup>* ‘to make, to construct’ [DUL: 202f]. For the latter cf. C 7 Mol *balay* ‘to build’ [FsM].

Note also: **\*bVHVI- > bVI-** ‘slave’: C 7 Mafa *bele*, Chuv *bèlèy*, Mbuko *bīlē* ‘slave’; 9 Msg *beel* ‘Sklave’, *bulii* ‘Sklavin’ [LkM]; E 6 Mok *bùlè* ‘esclave’, *búulè* ‘traiter comme un esclave, brimer’. Cf. 6 Daba *bàlám* ‘slave’.

<sup>30</sup> Devoicing and velarization in contact with *-l-* (*bl-* > *fl-*) is possible. Note, however, SEOmot: Zayse *pfulto*, Harro cluster *pult-* ‘well’ [BnO: 337].

//Sem Ug /b-<sup>ʕ</sup>-l/ ‘to make, work’, *b<sup>ʕ</sup>l* ‘(unskilled) labourer; craftsman, maker’ [DUL: 202f].

**186. \*bVI- ‘to flow (out), pour (out)’:** W 1 Hs *bùlbùulaa* ‘to pour out’; C 8 Zina *bàlà* ‘to flow’; 10 Azum *buluk* idf. of ‘splashing out (water)’; E 5a Mig *bóoló* ‘vider une bouteille d’un trait’, EDng *bòllē* ‘déborder (en bouillant)’, Bid *bòlol* ‘déborder (liquid)’. Cf. 7 Baka *bàhalay* ‘verser’ [BAS].

Deriv. a. **\*bVI(l)- ‘river’:** W 5 Bgh *bul*, *pwil* [Cs], Zul *bullai* ‘river’ [Cs ‘stream’; 5a WDng *bààlà* ‘rigil, rivière’, EDng *bàla* ‘le ruisseau’, 5b Mubi *bèeli* ‘fleuve’; E 3 Smr *bal* ‘river’ [Bn]. Cf. C 10 Azum *àbila* ‘a wave (on water)’.

b. **\*bVI- ‘rain’:** C 4 Bata (dial) *bole* [Bn]; E 3 Smr *beláani* [Luk] ‘rain’, cf. Ndam *bəlan* ‘ciel, dieu’, Tum *bàlàn* ‘God’.

//ECush Som *bilbiayl* ‘to spray’ [LIS], Oromo *bulula* ‘to flow’ [Grg], Cush Beja *bile* ‘Regen’ [RBd], Sem Hbr *ybl* ‘pour down rain’, *yābāl* ‘heavy shower’ [KB: 359], *ʔābēl* (< *\*yōbēl*) ‘Wasserlauf, Bach; water-course, brook’ [KB: 6], Aram Samal (Syr) *ybl*- (meaning uncert.) ‘river, brook’ [HJ: 433], Arab *wbl* ‘verser une pluie abondante (se dit du ciel)’, *wabl*- ‘pluie abondante’ [BK II: 1478]. Note also Sab *bll* ‘wet, moist’ [Bl: 44], Geez *bll* ‘moisten, wet’, Ug, Hbr *bll* [Lsg: 96]. Eg *wbn* [if= *wbl*] Nā ‘Quelle (in der Oase)’ [EG I: 294]. Cf. E 5a Mig *bálányi* ‘humidité’ < Arab *ballān-at*- ‘baigneuse’ [BK I: 156]. [AA 2 №131, Dolg: 54, Coh: 465, HSED №312].

For Ch *\*bal*-/*\*bulay* ‘pond’ see [BIL №3] and [TN №264].

**187. \*bVI-(bVI)- ‘to burn’:** W 1 Hs *bàlàabalàa* ‘scorching undecorticated monkey-nuts’; E 5a Mig *bàlbìlò* ‘brûler’; 5b Tor *biliw* ‘rôtir, griller’.

Cf. W 1 Hs *bàlbàl* adj. ‘(to burn) with bright flames’; 3 Kupto *bùlbùl* idf. ‘describing high flame(s)’; 6 WBade *bàlbàla* idf. ‘indicates flames’. Cf. E 6 Mok *ʔùbil-só*, pl. *ʔùbàlí* ‘braise’.

Derived nouns: a. **\*m-b[u]l- ‘ashes’:** W 3 Kupto *bùl-tó* ‘ashes’; E 4 Saba *tə-mbəl* ‘ash’; 5a Mig *bó-mból-ká* ‘cendre (d’herbe), suie’.

//Cush Sid *buluulo*, Gede’o *bululo* ‘ashes’ [Hds].

b. E **\*baal- ‘place for burning pots’:** 5a WDng *báálè* ‘creux circulaire rempli de paille pour faire cuire les poteries’; 6 Mok *bàalá* ‘foyer sur lequel on cuit, endroit où les poteries sont cuites’.

//Sem Akk *nablu* OB, MB ‘flame’ [CAD n<sub>1</sub>: 25], Geez *balbala*, *ʔanbalbala* ‘to blaze, kindle into blaze, flash’, *nabalbāl* ‘flame’, Eth ‘to blaze, flame’ (Tna *bālbālā*, etc.), Amh *bil-bill alā* ‘to burn quickly’. Common with Cush: Oromo *belbel* ‘flame’ Som, Beja, *balōl*, Saho *bolol* ‘burn’ [LsG: 95]. Cf. Sem *\*nabal-* [Kg: 195]. Also: Cush Beja *balól* ‘Brand, Flamme’, *balool* ‘burn’ [RBd], Saho *bola* ‘flame’ [Vr], Afar *boli* ‘to burn, to boil’ [RA]Berb Wrgl *bbebel* ‘monter haut (flame)’, Ghad *belbel* ‘brûler’, NIG *ebabbal* ‘grand feu’ [NZ: 52], Ayr *e-bewil* ‘baking in ashes’ [NZ: 81].

For Cush Afar *boli* ‘to burn, to boil’ cf. C 7 Baka *búláy* ‘bouillir’ [BAS], Mol *vəlay* and *vərdáy* ‘to boil’ [FsM].

For the next entry cf. Sem Geez *ʔanbalbala* ‘to blaze, kindle into blaze, flash’.

Deriv. in *ʔa-*: *\*ʔa-b[i]l-* > *ʔVI-* ‘to make fire’: W 2 Ngas *bel* ‘to light a fire’ [Fl], *bél* ‘to set fire, start a fire’ [JgN], Goem *bál* ‘to blow a fire’, Mghv *bél-wus* ‘to light fire’ [BIM], Mpn *bil-wus* ‘to make fire’; C 4 Gude *balā* ‘to blow out flame’; C 5 Pod *balā* ‘allumer (le feu), to light’; 7 Gis (*bal, bl*) ‘anblasen (Feuer)’; E 5a Bid *ʔebel* ‘se rallumer, se raviver (charbon)’. Cf. W 3 Krkr *bàliu* ‘firing a pot’ [GK].

Derived noun: *\*ʔa/m-bVI-* ‘embers, flame’: W 2 Mghw *mbàlēm* ‘Funke’ [JgS], Mush *baləm* ‘flame’ (apud [TAS: 13]); E 5b Brg *ʔubàali* ‘braise’, 5a Bid *ʔubàalā* ‘braise’, EDng *ʔubilā* ‘la braise rouge’.

[AA 2 №132: Ch Ngas, Mghv, Bid, Gis; Coh: 403, ISv: 17].

**188. \*bVI(l)- to tie**: W 3 Kupto *bèlléy* ‘to tie’, *bàl-téy* ‘to tie a knot’.

a. C *\*b[aj]l-* ‘rope, net’: 2 Bura *bala* ‘rope’, *bula* ‘rope shrub’, *balabala* ‘braided, twisted’ [BIB]; 5 Mlg *bél* ‘Gürtel, Gurt’; 8 Lgw *bale* ‘fishing net’ [AIL]; 10 Azum *abalalu-na* ‘cobwebs’.

b. *\*bVI-* ‘vein’: W 2 Goem *vèel* (< *-beel*, may derive from a form with a body-parts’ pref.) ‘vein, artery’ [Hlw]; C 7a Skn *bəli-ži* ‘vein’, *bule-žiy* ‘tendon’; 8 Log *bille* ‘Adern, veins’ [LkL].

c. *\*m-bVI-* ‘tendon, bowstring, root’: C 8 Afd *mbill* ‘Bogenschnur’, Bud *balei, palei* ‘Nerv, Sehne’ [Sol: 290], Log *mbélee* ‘Wurzel, root’ [LkL], *mḃil* ‘tendon, root’ [AIL], Kus *mḃil* ‘tendon, racine’, Makari *mḃil* ‘root, muscle’ > *mḃil-kan* ‘knot, noeud’ [Al]; E 4 Mawa *biluwa* ‘tendon’.

//Sem Akk *eblu* (OB) ‘rope’ [CAD e: 15], Ug, OAram *ḥbl* ‘cord, rope’ [DUL: 347] Arab *ḥbla* ‘prendre (une bête) au filet, serrer avec une

corde’, *ḥabl-* ‘corde; veine ou artère ou tendon’ [BK: 370], Geez *ḥabala* ‘to bind, fetter’, *ḥabl* ‘string, rope, snare’, *ḥablay* ‘plaited work, ornamental collar for mules’, Soq *ḥabehol* ‘rope’, Tgr *ḥabl*, Tna *ḥabli*, Amh *habl* ‘rope’ [LsG: 223].

d. CCh 7 Gis *ʔabalay* ‘Fusssspange’//Cush Afar *bilaa* ‘Bracelet, Arm-, Fussspange’ [RA].

For Arab *ḥābil-* ‘qui tend les filets; sorcier, magicien’ (ḥbl) [BK I: 370] see W 5 Bgh *bāl* ‘to tell fortune’.

Consider the next issue as a possible root-variant.

**189. \*HVbal- > \*bal-: 1. ‘to plait, knot’; 2. ‘to attach’:** 1. W 1 Hs *bállà* ‘to knot, secure by pulling, pullstrap’; C 5 Pod *bala* ‘tresser’; 2. W 2 Goem *bàl* ‘lock or fasten smth’ [Hlw], Mghv *bàl* ‘to unite, fix, join’ [JgM], Mpn *baal* ‘to join’; C 5 Pod *bala* ‘to catch with glue’; 7 Mada *ábal* ‘fixer, collar’.

For the semantic link between ‘to knot’ and ‘to attach’ see Arabic.

Derived noun: **\*bVly-/byVI- ‘trap’:** W 4 Wrj *byala-na* ‘trap for small birds’ [BIS]; C 7 Mafa *balay* ‘piège sp.’, Mbuko *bàlāy* ‘piège’.

//Sem Arab *ʿbl* ‘tordre, tresser; lier, attacher, serrer’, *ʿablal-* ‘corde grosse et bien tressée’ [BK II: 158].

**190. \*bVI- ‘(to) dance’:** W 1 Hs *bàluulà* ‘kind of dance’; C 9 Mlw *bùlì* ‘danser (hommes)’; 10 Masa *bòl* ‘danser’ [CC].

Derived noun: W 2 Mghv *bél* ‘dance (for energetic people)’ [BIM]; E 5a Bid *bàalà* ‘danse d’accueil’.

/ECush Som *bullo* ‘type of Somali dance’ [LIS], Eg *ybʾ* (if = [ybl]) ‘tanzen’, *ybʾ* AR ‘Tänzer’ [EG I: 62].

**191. \*(m-)bVI- ‘to harvest, gather, pluck’:** C 6 Mbedam *mbal* [NdP], Daba *mbàl* ‘cueillir’, Buwal *ᵐbāl* ‘to pick fruit; stop, hold, grab’, Mina *mbál-* ‘pick’ [FrJ]; 7 Ould *mbàlèt* idf. ‘arracher’; E 4 Barein *\*bíló* ‘to harvest (peanuts)’; 5a Mig *búláw* ‘ramasser un à un’, EDng *bàlbilē* ‘glâner, ramasser les grains de mil’. Cf. 6 Mok *búulè* ‘glaner’.

**192. \*(m)bVI- (or \*bVHVI- > bVbVI- (compensatory redupl.) > mbVI-/bVI- ‘to say, to cry’ > ‘a cry, chat’:** W 2 cf. Grk *ko-bel* ‘to call’ [Fp]; 3 Bol *bàlaa* ‘to cry’ [GAB], Ngm *bàlâ* ‘to cry’ [NEH], 4 Miya *babəla* ‘to say (several times)’ [Sch], *bəla* ‘to say’, Tsagu *mbul* ‘to say, to

speak' [SkNB]; C 5 Pod *mbala* 'répandre, annoncer'; 7 Baka *bùbùlu* 'crier' [BAS]; 8 Kus *bil* 'to say', Log *vile* 'to call someone' [AIK].

Derived noun **\*bVI-** 'a cry, chat': W 3 Bol *bèle* 'crying' [GAB]; C 7 Mbuko *bàlà* 'causerie', Mada *bòblò* 'crise de deuil, crise d'alerte'; 10 Mus *bolla* 'langue, discours, sermon' [ShyM]; E 2 Lele *bilà, bùlà* 'bruit, cri', *bòl* 'paroles abondantes'. Cf. C 8 Afd *mbóli* 'Sänger, singer' [Sol: 130].

a. **\*bVHVI-** > **bHVI-** > **ɔVI-** 'to say, tell': W 3 Dera *bálè* 'to say' [NmK], cf. Krkr *boolo* 'crying for help' [GK]; C 1 Tera (dial.) *ɓala* 'to speak' [Kr]; 5 Pod *ɓala* 'raconter'.

//Sem Geez *bəhla, bəhla* 'to say, speak, call', Mhr *behl-īt* 'word, thing', Eth Tna *bälä*, Tigre *bela*, Gaf *balä*, etc. 'to say' [LsG: 89].

Accord. to Leslau the following forms are cognate: Akk *ba'ālu, bālu* (SB) 'to beseech, pray', Arab (*bhl*) 'ibtahala 'to implore, beseech'.

For possible cognates of Arab *bhl* 'maudire, atteindre de sa malédiction (se dit de Dieu)' [BK I: 173] see Chadic: W 3 Dera *bèelé* 'to insult' [NmK]; E 1 Kera *ɓalgé* 'abîmer, offencer'.

[AA 2 №110 **\*bahl-** '(ritual or emphatic) speech; to speak' (includes Ch W 1 Hs *bälli* 'quarrelling, abusive language' and W), for Log, Lele forms see [TN №254].

**193. \*bV(wV)l-** 'to grow': W 2 Mpn *boál* (*bwal*) 'to grow abnormally'; C 2 Bura *bula* 'to develop or grow rapidly' [BIB].

a. **\*(bV-)ɓVI-** 'big, wide': W 3 Gmy *puul* 'large sized' (apud [TAS: 291]; 4 Paa *bábəlä* 'very big' [MS], *bəlam*, Diri *bula* 'long, tall, big' [SkNB]; 6 Mbedam *bəla-x<sup>w</sup>* 'gros' [NdP]; 8 Lgw *bala* '(to be) wide' [AIL]; 9 Msg *bóbolo* 'gross' [LkM]; 10 Azum *bulà* 'wide'; E 1 Kera *bòbló* 'big'; 3 Cf. E 5a EDng *bòló-kí* 'long, profond, grand'.

//Sem Akk *ba'ālu* 'to be abnormally large' [CAD b: 1].

For C 10 Azum *bulà* 'wide', *buloda* 'distance, the space between two things' see PECush **\*bald-** 'broad': Burji, Bayso *bal'-*, Som *ballaḍ-*, Oromo *bal'-, ball-, bald'-* [SsB], Rend *ballaḍ-an* [Sam].

Denom. in *ʔa-*: **\*abVI-** > **ɔVI-** 'to enlarge, to widen': E 3 Tum *ɓəl* 'élargir', Ndam *ɓəla* 'evaser, agrandir, élargir (un trou)', *ɓəl* 'grand'.

The next rot may be cognate, note that terms for 'many' and 'big' are confused in W 7 Bok *ɓəl* 'viel, gross werden'.

**194. \*(m-)ɓVI-** 'many, much': W 2 Ngas *bál* 'be sufficient, plenty' [JgN], *bull* 'much' [Or], Mnt *bul-bul* 'many' [Fp], Goem *mbel* 'many,

in great number' (apud [TAS: 31]), Goem *mbàl* 'much, many' [Hlw]; 3 Tng *bilim* 'crowd grouping, multitude'; C 5 Pod *mbála* 'to be too much'; 10 Musey *bòlòw*, Lew, Marba *ʔàblàw* 'nombreux' [LexC], Mus *bolow* 'beaucoup, nombreux' [ShyM]; E 1 Kera *àblàw* 'viel, zehr'.  
Derived verb: C 8 Kus *bal-ka* 'to increase, add' [AlK].

Denom. verb in *ʔa-*: **\*ʔabVI-** 'to multiply, increase': W 2 Mghv *búl* 'to increase' [BIM]; 5 Zul *búli* 'to increase' [Cs №900]; 7 Bok *bâl* 'viel, gross werden' [JgR]; C 5 Pod *bála* 'multiplier'.

Deriv. W 3 Krf *búllí* 'many, much' [SchB]; 7 DB *bâl* 'zu viel sein, im überfluss vorhanden' [JgR].

//Sem Arab *bawl-* 'grand nombre', *bawāl-at-* 'grand nombre, grande quantité' [BK I: 180], Sab *bll* 'abundance' [SD: 28], Cush Arb *buli* 'all' [ATO], Om Kafa *bulloo* 'Gesamtheit, jeder, alle', *balloo* 'hundert' [RK].

For Ch 'many, much' and Akk 'to be abnormally large' see [TN №141].

**195. C \*bVI-** 'to swell': 3 FK *búl* 'to swell up, inflate'; 10 Gizey, Masa, Musey, Ham *bâl*, Lew *bòl* 'enfler' [LexC], Masa *bâl* [CC], Musey *balla* [ShyM] 'gonfler, enfler'.

Derived nouns: C 3 FK *mbála-kàná* 'swelling or groin following injury to leg'; 7a Skn *mbàla-kən* 'mumps, swelling'.

Cf. W 2 Mpn *bāḏal* 'to swell up, be filled up (e.g. with food)'

a. **\*bVI-** 'to be full': W 3 Tng *bəl* 'full'; E 5a EDng *bàlče* 'se remplir à nouveau (puits)'.

**196. \*b[a]l-** < **\*HVbVI-** > 'to shoot (an arrow), sting': W 1 Hs *bállà* 'to inflict, sting, kick'; 7 Bok, DB, Sha *bol* 'schiessen (Tiere)' [JgR]; C 6 Buwal *bâl* 'to shoot'; C 6 Gavar *bal* 'tirer', Daba *bâl* 'lancer la flèche, piquer', Mina *bâl-* 'to shoot' [FrJ]; 7 Muy *ábál* 'to shoot, sting', Mbuko *mbalay* 'tirer la flèche', Chuv *mébèlèy* 'viser (avec une arme)', Mada *ábal* 'tirer (a l'arc), flécher, piquer (insects)', Baka *bar* 'tirer' [BAS]; 9 Mnj *bili* 'lancer'; E 2 Lele *bilé* 'tirer'.

Derived noun: W 3 Krkr *bèlu* 'arrow' [Kr]; E 5a Bid *bállà* 'flèche', *bàalò* 'arc', 5b Tor *bele* 'arrow'.

//Sem Arab *nbl* 'jeter, lancer (traits, dards)', *nabl-* 'flèche' [BK II:1187]. Cf. also Arab *ʔbl* 'garnir une flèche d'une fer long et large', *mibʔal-at-* 'fer de flèche long et large, flèche au fer long et large' [BK II: 158f].

**197. \*bal-** > **\*HVbVI-** > ‘to send, chase away’: W 3 Kupto *bàlléy* ‘to chase away birds’; C 5 Gdf, Gava *bl:a*, Chn *bəla* ‘to send’ [HmG], Wnd *bálá* ‘to send’ [FW], Mlg *bála* ‘senden’; 7 Mbuko *bāl* ‘chasser’, Gis *bol* ‘verfolgen, verjagen’.

//Sem Arab *ʿbl* ‘repousser, éloigner’ [BK II:158].

Note two root-variants:

a. **\*(m)bVI-** (possibly, compensatory prefixation < **\*HVbVI-**) ‘to drive, chase, push’: C 2 Klb *mbəllà* ‘to push’ [MuK], 5 Pod *mbála* ‘depart, send, throw’; 7 Mafa *mbál* ‘éloigner, chasser’.

b. W 5 Dott *bəl* ‘to drive away’ [CrD]; C 3 Bana *vəli* (*w-b-l / n-b-l*) ‘envoyer; send’.

Deriv. in *-d-*: C 7 Muy *ábəlà-d* ‘to push’.

//Cf. Sem Sab *nbl* ‘to despatch, send so. on a mission’ [SD: 90], Arab *wbl* ‘poursuivre avec ardeur, donner une chasse vigoureuse à sa proie’ [BK II: 1478].

**198. \*bVI-** < **\*HVbVI-** ‘to throw, fall’: W 1 Hs *billà* ‘to throw’; 3 Krkr *bàlu* ‘to drop, release, divorce, lay eggs’, *bàlaa* ‘to throw, put on an upper garment’ [GK], Kupto *bùuléy* ‘to throw, to fling’, *bùkléy* (internal *-k-* pl.) ‘to throw’; 7 Kul *bil* ‘werfen’, DB *bil* ‘über Etw fallen, stolpern, anstossen’ [JgR]; C 5 Glv *bəl* ‘to throw’, *bil* ‘to fall’, 5a Gdf *bl:a*, Gava *b<sup>o</sup>la* ‘to fall’ [GvH], Wnd *bela laya* ‘to lay eggs’ (*laya* ‘egg’) [Voc].

//Sem Soq *ʿbll* ‘faire descendre’, Arab *ʿbl* ‘tomber (feuillage)’ [LsS: 293].

**199. \*bal-** ‘field’: W 3 Kupto *bàlbàl* ‘field(s), space, area, ground’; C 3 FK *bábàl* ‘field’; 8 cf. Ngala *baala* ‘plain, flat country’ [Bn]; E 4 Mawa *bəla* ‘champ’. Cf. C 5 Hdi *vəli* ‘place’.

//PECush *\*bal-* ‘field, plain’ [SsB: 32], Oromo *boollee* ‘soil’ [Grg], Sem Arab *ba<sup>ʿ</sup>l-at-* ‘champ’ [BK I:144], Yem dial. *ba<sup>ʿ</sup>l-* ‘land sown in winter’, Sab *b<sup>ʿ</sup>l* ‘rain-irrigated land’ [SD: 26].

Denom. verb in *ʔa-* (Caus): **\*ʔabal-** > **bal-** ‘to clear a field’: W 3 Ngm *bàalà*, *bàalo* (dial.) ‘to clear bush for a farm’ [NEH], Bol *bòlà* ‘clearing area for a farm’ [GAB], Kupto *béli* ‘clearing the bush for farming’.

Derived noun: C 5 Malgwa *bala* ‘Gemeinschaftarbeit auf dem Field’, Lmn *bàlà* ‘customary collective help or community labour’.

//Cf. Om Yemsa *bul-* ‘(Land) bebauen’ [LmY].

The following forms may be cognate with the main root:

a. C **\*bal-m- ‘place’**: 9 Mnj *balam* ‘emplacement, endroit’; 10 Musey *balamma* ‘place’ [ShyM], Dzpww *mbàlám* ‘espace dévasté’.

b. **\*bal-k- ‘threshing place’**: 5a Hdi *bàlik<sup>wi</sup>* ‘round walled area where grains are threshed’, Lmn *bàlkò* ‘threshing place or ground’ [Wff]; 7 Vame *valak* ‘cour intérieure’.

The following forms are labelled as loans from Kanuri *bàlbàl* ‘Ruheplatz (vor der Hütte)’, namely: C 2 Klb, Mrg *bàlbál* ‘open space’ [MuK, HfM: 18]; 8 Bud *bélbelee* ‘Hof’ [LkBd], Kus *balbal* ‘courtyard’, Makari *balbal* ‘cour’ [AIK, AIM]. Note however the lack of a Nilo-Saharan etymology. Cush Burji *balbala* ‘place covered by a canopy’ [SsB] may be also involved.

The next root is possibly cognate:

C **\*bal- (< \*bHal-) ‘open, uncultivated land’**: 5 Lmn *bálá* ‘open space between two settlements’, Pod *bala* ‘terrain plat’; 7 Ould *bálá* ‘terrain déserté, sans herbes’, Mada *bálá* ‘lieu inculte, stérile, désert’; 8 Makari *mbala* ‘terrain’. Deriv.: 7 Muy *bàlál* ‘abandoned’.

//Sem Aram *bālā, bā’lā*, Mand *bala* ‘prairie, terre inculte; animaux féroces?’ [DRS: 51]. Cf. the next issue.

**200. \*ball-/\*bVlw- ‘jackal, (barking) fox’**: C 6 Daba *bàlwāy* ‘renard’; 7 Baka *bóló* ‘dog’ [YB]; 9a Gdr *bàlwá* ‘fox’ [FrG]; 10 Gizey *bàlèy*, Masa *bà/òliy*, Musey *bòlù* ‘chacal’ [LexC], Musey *boli-na* ‘chien sauvage’ [ShyM], Azum *boli-na* ‘like a fox; has a white tail’; E 5 Bid *bàlàaliyo* ‘fennec’, WDng *bòllò* ‘espèce de chat sauvage au pelage fauve, il creuse des galeries en terre, aboie comme chien’, EDng *bólóló* ‘le chacal’; 7 Jegu *báló* ‘Fuchs’.

//Sem Geez *ʔabbəl* ‘jackal’ [LsG: 3]. For Geez and ECh ‘hyena’ see [TN №271].

**201. \*b[a]l- ‘a species of crested bird’**: W 1 Hs *balbelàa* ‘buff-backed heron or cattle egret’; 3 Bol *bàalà* ‘Abdim's stork’ [GAB]; 4 Miya *mbàlam* ‘crowned crane’ [Sch]; 5 Guus *bélbéla* ‘white egret’ [CrG]; E 2 Lele *báàlē* ‘heron’; 5a Mubi *bíuulè* ‘héron sp.’ [JgM]. Cf. W 3 Kupto *ʔàbùulà* ‘bird sp. (marabou stork)’.

//Sem Akk *bulīlu* lex\* ‘a species of crested bird’<sup>31</sup> SB [CAD b: 310, AHw: 137], Berb EWlm, Ayr *ebélbél* ‘héron’ (a Ch loan?) [NZ: 53].

<sup>31</sup> Accord. to [SED I №60], Akk is cognate with EthSem *\*bull-* ‘dove’, see below.

For Hs, Lele, Mubi, Eg *bn.w* ‘Phönix’ and Berber see [EDE II: 211, TN №282].

**202. \**bal-* ‘hangar, shelter’:** W 4 Miya *bali* ‘entrance hut’ [SkNB]; 5 Dott *báláŋ* ‘hut’ [CrD]; C 6 Daba *màbàlà* ‘hangar’; 7 Mofu *bàla-k* ‘hangar’, Mada *bala-k* ‘séchoir, abri’, Mol *abala-k* ‘hangar to give shade in front of a house’ [FsM], Gis *ʔabalak* ‘Schattendach’; 9 Mnj *bala-k* ‘hangar’, Msg *bála-k* ‘Schattendach’ [LkM]; 10 Dzpw *bàlà* ‘abri’, Azum *bala* ‘a rough-shelter’.

**203. \**ba/ul-* (bwl) ‘goat’:** C 1 Boka *bwàlə* [Kr]; 8 Afd *búl-goéh* ‘Ziege, she-goat’ [Sol:122]; 10 Azum *balâ* ‘a castrated goat’; E 2 Kaba *bal*, Lele *bùlóbùló* ‘bouc’; 4 Sok *bàl*; 5a Mig *bòolíyò* ‘he goat’ [JgIb]; 6 Mok *báàlè* ‘grand (bouc)’.  
/Cf. Eg *bʔ* AR ‘heiliger Bock’ = ‘ram’, for alternative cognates see [EDE II: 23-25].

**204. \**b[u]l-* ‘hole’:** W 2 cf. Mpn *bàlló-k* (or *bàl-lók*) ‘hole’; C 7 Mada *blè-k* ‘trou, nid’, Mafa *mbolo-v* (< *mbolo-b*) ‘rectum humain’; 8 Lgw *búlu*, Makari *bolo* ‘hole’, cf. Kus *bil-gʷi* ‘anus’ [Al]; E 5a Mig *bùulè* ‘entrée (d’un concession), trou (dans un mur)’, Bid *búllo* ‘fond, trou’, *búlàlo* ‘anus’, 5b Jegu *bolo-k etento* ‘Nasenloch’ (‘hole’ + ‘nose’) [JgJ]; 6 Mok *bùl-dó* ‘trou, valley’. [HSED №332].  
Cf. W 7 Bok *ʔbwal-ši* ‘Anus, Vagina’ (cf. *šiši* ‘excrement’) [JgR], DB, Sha, Mundat *mbòkòl*, Monguna *mbùkòl* ‘vagina’ (internal *-k-ʔʔ*) [RC].  
Denom. verb in *m-*: W 3 Kupto *mbòoléy* ‘to pierce, make a hole’; C 7 Mbuko *mbalay* ‘manger un trou (insecte)’.  
Denom. verb in *ʔa-*: \**ʔabVI-* > *ʔVI-* ‘to make a hole, to hollow’: W 1 Hs *búulà* ‘to make a hole, knock a hole in thing’; 2 Ngas *bèl* ‘to hollow out, bore a hole’ [JgN], cf. Mghv *bél* ‘einen Hirsenhahn aushölen’ [JgS].  
Derived nouns: W 3 Krkr *bululu* idf. ‘very small opening or hole’ [GK]; 5 Bogh *pyu-bol*, Mng *mbil* ‘door’ [Cs], Zaar *bî:l* [CrZ] ‘doorway’ [AA 2 №135: Cush+Ch ‘to make a hole’].

**205. \**bul-* ‘type of man's gown’:** W 3 Bol *bullàm* ‘type of men’s gown’ [GAB], Tng *bulum* ‘traditional man's skirt’; C 2 Bura *bul* ‘large gown worn by men’ [BlB].

a. **\*(?a)bVI- ‘loin-cloth for women’**: C 7 Muy *àbòlò* ‘woman's cache-sexe (made of bark)’, Ould *ābāló* ‘cache-sexe des femmes Madas’; 8 Kus *bol* ‘cloth worn by woman’ [AIK]; 9 Msg *ablúk* ‘Schambinder (der Frau)’ [LkM]; 9 E 5a WDng *bállà* ‘cache-sexe’; 6 Mok *búlè* ‘cache-sexe f., tissu de cotton blanc’. Cf. W 3 Tng *belle* ‘sp. type of leaves (used as cache-sexe)’.

//Cf. Sem Akk *bultu* (a blanket?) EA, NUzi, *bulû* (NB) (a curtain of linen, used in sanctuaries) [CAD 311, 313].

**206. \*bVI- ‘light’**: W 2 Ngas *bel* (or *bäl*) ‘clear, daylight’ [F1]; 4 Kariya *bila-du* ‘lightning’ [SkNB].

Denom verb in **?a-**: **?abVI-** > **\*bVI-** ‘to become bright, to shine’: W 2 Ngas *bel* ‘to clear up’ [JgN]; 3 Bol *bèelu* ‘to become bright’ [GAB]; C 3 FK *bäl* ‘to shine’; E 1 Mobu *bálányé* ‘briller’; 5 Mig *béeló* ‘briller’. Derived noun: W 4 Jmb *balala* ‘whiteness’ [SkNB].

//Sem Akk *ba’ālu* [OB, SB] ‘to become bright, to shine brightly (referring to the planets, sun, moon and other stars)’ [CAD b: 1].

Denom. verb in *m-* ‘to shine’: C 2 Mrg *mbäl* [HfM: 34], Klb *mbäl* ‘to shine’ [MuK]; 7 Muy *mbül* ‘shining, pretty’; 6 Daba *mbäl* ‘allumer’. [AA 2 №133: Ch Ngas, Cush *\*b-l* ‘day (24 hours)’].

**207. \*bVI- ‘man’**: W 3 Bol *balaawò* ‘respected old man’ [GAB]; 4 Wrj *mbulai* ‘common man’ [BIS]; C 8 Log *bla*, pl. *mi* ‘homme’ [Mo: 49], *bàlò*, pl. *mùngù* ‘man’ [JgIb], *bàla* ‘Mensch’ [LkL], Afd *beelo* ‘people’ [Bn], *beló*, Gulfei *bel-ewe* ‘Mann’ [Sol: 232], Makari *blo* ‘man’, *blo-se* ‘man (male)’, Kus *bluwe* ‘man (male)’ [AI].

Cf. 10 Azum *ablou-dà* ‘many people, crowd’, C 7 Balda *bùlù-múnj* ‘être humain’ [Bry].

Deriv. in *-k-* ‘guest’: C 6 Buwal *<sup>m</sup>balok<sup>w</sup>* ‘guest, visitor’; 7 Zlg *mbálák<sup>w</sup>* ‘visiteur’, Mbuko *mbálók* ‘étrangler, hôte’.

Cf. also: ‘alien’: C 10 Musey *babali-na* ‘enemy’ [ShyM]; C 5 Hdi *mbəlaam* ‘anyone who is not part of a blacksmith family’; 7a Skn *mbilim* ‘non-smith, member of the farmer caste’.

//Sem *\*ba<sup>l</sup>-* ‘seigneur, maître, mari’: Akk *bēlu*, Ug *b<sup>l</sup>*, Hbr *ba<sup>l</sup>al*, Arab *ba<sup>l</sup>-*, Geez *ba<sup>l</sup>āl*, Amh *bal*, Tgr *ba<sup>l</sup>*, Soq *ba<sup>l</sup>al*, etc. [DRS: 74, LsG: 84, Kg: 237]. Cf. Cush Afar *báll-aa*, fem. *-á*, Saho *báll-o*, fem. *-ó* ‘father-in-law’ [RA].

[HSED №182].

**208. \*bVI(l)- ‘spear’:** W 1 Hs *bellam* ‘spear, harpoon’; 3 Tng *bal* ‘spear with a large blade’, Kupto *béllí* ‘spear sp (for fishing)’, *bèllèm* ‘spear sp. (for horse riding)’; C 5 Lmn *bálá* ‘spear with leaf-shaped blade’.

Denom. verb in *ʔa-*: \**ʔa-bVI-* > \**bVI-* ‘to pierce (with a lance, sharp point, through)’: W 3 Krf *bòyòléy* ‘to pierce’ (pl. in *-k-*) [Stl], Bol *bìl-tu* (complete action) ‘to pierce or lance a boil, blister’ [GAB]; 4 Jmb *bul-* ‘to pierce’ [SkNB]; C 9 Mnj *bili* ‘enfoncer (une pointe), percer’, Mulwi *bili* ‘percer’ 10 Azum *balá* ‘to transfix (across)’; E 1 Kera *bélé* ‘nageln, clouer’.

a. W 3 \**bVI-* ‘sharp edge’: Bol *bél* ‘cuspid, canine tooth’, *bèlu* [GAB], Ngm *bàalà* ‘spur on rooster's foot’ [NEH].

Denom. verb in *ʔa-*: W 3 Dera *bèelé* ‘to sharpen edge of tool by beating’; 5 Zaar *bal* ‘to sharpen by beating the edge; sharp’ [CrZ].

Denom. verb in *m-*: C 5 Pod *mbala* ‘to sharpen’.

//Sem Akk *bēla* ‘etw. Waffe’ (not in CAD), cf. Geez *balḥa*, *balḥa* ‘be sharp’, Tna *bālḥe*, Tgr *bālḥa*, Amh *bälla* ‘be sharp’, Amh *bāliho* ‘knife’ > Bil *balaḥ* ‘spear’ [LsG: 95].

The next root may be cognate with Ch ‘spear’, or with Cush ‘knife’.

**209. \*bil- ‘throwing knife’:** C 10 Masa *bīl* [CC], Musey *bil-na* [ShyM], Masa, Musey, Marba *bil-* ‘throwing knife’ [Shy], Azum *abilá* ‘kind of a throwing knife’; E 2 Lele *bòlòm* < \**bil-om* < \**bil-um*, vowel assim.) ‘throwing knife’. Cf. C 5 Mlg *biila* ‘Schere, scissors’.

//ECush Oromo *billaa* ‘sword, knife’ [Grg], Arb *bila*, Tsam *bilako* ‘knife’ [ATO], Om Wolt *billama* ‘knife’, Cush Kamb, Had *billawa*, Sid *billaawa*, dull *pillawo*, Arb *billaw*, Oromo *billaa*, Som *billaawe* [LmW: 319f]. According to Lamberti, Amh *billawa* ‘petit couteau de table’ is a Cush loan. Cf. Eg *ybn* [if \*ybl]. Sp ‘Art Messer’ [EG I: 63]. Consider the following forms as loans from Kanury *beli* ‘razor’ [Sol: 307], note one and the same root-shape through Chadic (typical of loan-words): W 3 Kupto *bèlí* ‘shaving knife’; C 2 Bura *bel* ‘razor’ [BIB]; 8 Lgw *bel*, Kus *bel* ‘razor’ [ALL, AIK]; 10 Masa, Ham *bèlè*, Gizey, Musey, Lew, Marba *vèl* ‘rasoir traditionnel’, Musey *vella* ‘la lame du rasoir’ [ShyM], Azum *velá* ‘razor’; E 5a Mig *bèllé* ‘couteau-rasoir’, EDng *bèllé* ‘le couteau très fin’; 5b Mubi *bèlì* ‘rasoir’ [JgM].

**210. \*bVIV<sup>2</sup>- (\*bVI-h- pl.?) ‘scales, bark’:** C 10 Dzpw *bilè<sup>2</sup>è* ‘écaille’,

Dari *bālē?* ‘bark, scales’, Peve *bālē?*, Hedē *bālē?*, Marba *bloha* ‘bark, peel’ [Shy], Azum *buloʔā* ‘bark, husks’; E 2 Kaba *bala*, Nch *ko-bla* ‘peau’ [HmK].

Denom. verb. W 5 Jimi *bula* ‘to peel’ [Cs].

Deriv. verb in *-d-*: C **\*mbVI-d-** ‘to peel, bark’: 7 Mbuko *mbə/ulo-d* ‘enlever la peau (maniok.)’, Mada *ómbló-d* ‘arracher à la main, écorcher’, Mol *mbəl-doy* ‘to skin, peel’ [FsM]; 10 Azum *blo-da* ‘to strip (the outer layer of skin or bark) with the teeth’.

For a root-variant see N<sup>o</sup>219. **\*bVI-** ‘skin, leather’ > **\*bVI-k-** ‘bark’. Note that both roots are attested in the masa group (C 10).

**211. \*ba(y)l-** ‘uvula, throat’: W ‘uvula’: 1 Hs *bèlii*; 2 Mghw *bèlbèl* [jgS]; 4 Miya *bèlebel* [Sch]; 5 Bogh *beelu* [Cs N<sup>o</sup> 97]; 6 Duw *bàalu* ‘uvula’; E 4 (dial.) *bolol* ‘throat’; 5a Bid *béle* ‘gorge, voix’.

**a. \*(m)bul-** ‘crop of a bird’: W 2 Goem *bûl* ‘goitre’ (apud [TAS: 21]); 7 Bok *bùlè?* ‘Kropf’ [JgR]; C 6 cf. Gavar *mbil-gin* ‘goitre’; 8 Makari *mbulu* ‘crop of a bird’ [AlM].

For a primary verb cf. C 7 Mofu *-bál-* ‘donner à manger (à un enfant)’, derived noun: W 4 Wrj *bulaʔana* ‘manger (carved from wood for putting food for animals)’ [BIS].

//Sem *\*bl<sup>s</sup>* ‘to swallow, to eat’: Hbr *bāla<sup>s</sup>*, Aram *b<sup>e</sup>la<sup>s</sup>*, Mand *bla*, Ug *\*bāl<sup>s</sup>* [DRS: 68, Kg: 78], Arab *bl<sup>s</sup>* ‘avalér’, II ‘donner à avalér’, *mabla<sup>s</sup>* ‘canal de deglutition, gorge’ [BK I: 161], Geez *bal<sup>s</sup>a* ‘eat, consume’, *bəllā<sup>s</sup>* ‘food, that which is eaten up, residue of food, fodder’, EthSem *bl<sup>s</sup>* ‘to eat’ > Cush: Bil *belaā<sup>s</sup>*, Saho *balaʔ* [LsG: 94]. Cush Beja *bála* ‘Kehle, Schlund’ [RBd], Om Koyra *balaa* ‘neck’ [BžO], Berb Ghat *bélébélé*, Fig *tabilult*, Snus *tabelhuht (blh)* ‘lurette’ [NZ: 53, 61], Eg *b<sup>n</sup>.t* [if b<sup>s</sup>l] Pyr 1. ‘Hals o. ä eines Vogels?’; 2. ‘als menschlicher Körperteil: Hals o.ä. /neck of a bird, of a man?’ [EG I: 447].

[Coh: 46, AA 2 N<sup>o</sup> 136: Ch Mghv, Bok, Bid, HSED N<sup>o</sup>333, EDE II: 163-5].

**212. \*bVI-** ‘(planting) stick, hoe’: W 3 Kupto *bèl* ‘planting stick’, *bèlé* ‘stick; flail, cudgel’, Bol *bèl* ‘long-handled planting hoe’ [GAB]; 4 Wrj *balale-na* ‘hoe used for planting’ [BIS]; E 5a EDng *béla* ‘la houe à long manche ou le manche seul qui sert à sarcler’, Mig *béllá* ‘bâton (pour transporter de l’eau)’, Bid *béllà* ‘bâton servant de soutien pour le transport’. For Mig, Bid see [TN N<sup>o</sup>304].

The next root is most probably cognate:

**a. \*m-b[u]- ‘heavy stick’:** W 3 Tng *bulāŋ* ‘stick, club’; 5 Zaar *mbúluŋ* ‘heavy wooden club’ [CrZ]; C 5 Hdi *mblaw* ‘bâton’ [Ech]; 7 Mafa *mbəlaw* ‘fléau (poure battre le mil)’; C 8 Bud *bilabila* ‘Pfahl, pole’ [LkBd], Makari *mbol-dé* ‘kind of stick’ [AIM].

//Cf. Eg *nbʒ* [if nbl] seit Westcar ‘Tragstange für den Korn sack’, *nbʒ* 19 ‘Pfahl’ [EG II: 243], Sem Arab *wbl* frapper qqn avec une bâton’, *wabīl-* gros bâton’ [BK II: 1478].

For C 7 Mofu *bébéle* (compensatory redupl.) ‘bois de soutien d’un hangar’ cf. Eg *ʿbʒ* [if ‘bl] ‘der Stab zum Schlagen und als Herrschaftszeichen’ [EG I: 176].

**213. \*bVI- ‘magic (spirit, socerer)’:** W 4 Paa *bali* ‘bewitch’, *bàlà-mà* ‘witchcraft’ [MS], Wrj *bələ-mai* ‘sorcerer’ [BIS]; C 7a Skn *ma-mbəlum* ‘spirit, ghost’; 8 Kus *balai* ‘ghost (visible apparition)’, *mbilla* ‘magic’ [AIK]; E 3 Ndam *bəli* ‘guérisseur, sorcerer’; 4 Barein (dial) *bōli, boli, bōli* ‘traditional healer’. Cf. E 5a Bid *bulo* ‘arbre sous lequel on dépose les biens du mort’.

//Sem Geez *balbala* ‘predict through omens’ [LsG: 95].

Cf. E 3 Smr *bələ* ‘guérir’, rather < Sem Arab *bll* ‘guérir, être guéri’ [BK I: 155].

**214. \*m-/b-bal- ‘shoulder, upper arm’ > ‘wing’:** W 2 Mghw *baal* ‘arm, hand’ [BIM], ‘upper arm’ [JgS] Ngas *beel* ‘shoulder’ [F1], ‘shoulder blade’ [JgN], Mpn *bàal* ‘arm’; 3 Ngm *mbùlu* [NEH], , Pero *té-mbèl*, Dera *bàlá-m* ‘shoulder’ [NmK], cf. Krkr *se-balia* ‘arm between elbow and shoulder’ [K1]; 5 Plc *babəla*, Zul *bi-mbyaalá* ‘shoulder’ [Cs №85]; 7 Bok *baal* ‘Schulter’ [JgR]; C 1 Tera *be<sup>m</sup>bálém* ‘shoulder’ [NmT]; 2 Chb *bàbál* ‘Schulter’ [HfC]; 7 cf. Gavar *ma-balaley*; 8 Makari *mbala* ‘upper arm, wing’ [AIM], Afd *mbəla*, Sao, Gulfei, Makari *mbala*, Kus *mpala* ‘bras’ (< *mbala*, influenced by *pala* ‘wing’) [Sol: 257, AIK], Afd *bál-deh* ‘Flügel’ (‘arm’+‘bird’) [Sol: 121]; E 2 Lele *būblā* ‘shoulder’.

Accord. to [GrR], kotoko forms (including Log *mpala*) cognate with Mbuko *baža* ‘upper arm’.

//Sem Akk *nuballu* SB ‘(Adler-)Flügel’ [AHw: 799], ‘wing’ [CAD n2: 306], Cush Beja *babáal, babáar* ‘Federn’ [RBd], PECush *\*baal-* ‘feather’: Burji *baal-ée*, Afar *bal*, Dasenech *baal*, Had *bal-l-a<sup>2</sup>e*, Boni,

Bayso *baal*, Konso *palla* [SsB], Som *baal* ‘wing, feather’ [LIS], Oromo *bala* ‘wing’, *baala* ‘feather’ [Grg], HEC *\*baalle* ‘feather’: Kamb *baall-ita*, Sid *balle* [Hds], Om Kafa *baaloo* ‘feather’ (not in RK); Wolt *baalliy*, Dawro *balle* ‘feather’, Cush Gaw *paala* (*p-* < *\*b-*) [LmW: 320]; Berb Mzab, *tbulbult*, Nef *tebulbult* ‘plume d’oiseau’ [NZ: 55]. Cf. Sem Arab *wābil-at-* ‘tête du fémur; tête du bras, le haut de l’épaule’ [BK II: 1478].

[AA 2 №129: WCh Ngas, Mghv (Sura), C 8].

Consider the following Chadic and Cushitic forms as Arabic loans:

Ch W 3 Bure *báalé* ‘leaf, foliage’, Cush Arb *baala* ‘leaf’ [ATO], Oromo *baala* ‘leaf’ [LmW: 320]. Cf. Sem Arab *‘abāl-at-* ‘une feuille’ [BK I: 159].

**215. *\*m-bVI-* ‘dove’:** W 1 Hs *bóoloo*; 2 Ngas *bul* [Fl], *m̄bul* [JgN], Mghv *m̄bul* [BIM], Mpn *m̄búl*, Chip *bul* [Kr] ‘dove’, Goem *bál* ‘pigeon or dove’ gen. [Hlw]; 3 Kupto *mbòlè* (gen.), Bure *mbíul-dò* ‘dove’, Bol *mbole* ‘Senegal dove’ [GAB], Tng *mbole* ‘turtle-dove’; C 1 Tera *mbólá* ‘dove’ [NmT]; 7 Mada *óblò* ‘pigeon sauvage sp.’; E 2 Gbr *bélu* ‘Taube’ [Luk]; 5 Bid *bályà* ‘tourterelle sp.’

//Sem Amh *bullal* ‘dove’, gurage Gogot, Soddo *bullal*, Muher *bulle*, Ezha *bunnəyt*, Chaha *bunyät*, etc. ‘pigeon’ > Cush Beja *belbel* ‘wilde Taube’, Oromo *bulbula* ‘Taube’ apud [SED I №60].

[Gr: 55, ISv: 17, AA 2 №134: Ch, EthSem, Geez *bābil* ‘name of a fictitious bird’, HSED №330].

On Eg *bʾ* Pyr ‘der Vogel, den die Hieroglyphe darstellt’ see [EDE II: 4f].

**216. *\*(m)bal-* ‘locust’:** W 2 Mghv *mbwàl* ‘grasshopper, locust’ (internal *-w-* pl.) [BIM], Mush *bwaal* ‘grasshopper’ [JgO]; C 9 Log *mbilim* ‘locust’ [AIL], *mbùllum* ‘Heuschrecke’ [LkL]; E 5 Bid *bàalò* ‘criquet-pèlerin’.

//Om Wolt *booliy* ‘locust’ [LmW: 320]. Cf. Sem Geez *nəbləs* ‘criquet’ [LsG: 383].

**217. *\*m-bVI-* ‘flute’:** 3 Bol *mbèele*, *mèele* ‘type of flute’ [GAB]; C 3 FK *mbəlaaw* ‘flute’; 7 Mofu *bəláy* ‘grande flûte’, *mbálay* ‘kind of flûte’.

//Cf. Sem Amh *ənbilta* (> Geez *ʾənbiltā*), Tna *ʾəmbilta* ‘flute’ [LsG: 27].

Cf. W 2 Mghv *bél* ‘dogstooth grass; flute made from grass of this name’ [BIM], W 2 Ngas *beel* ‘musical wind instrument’ [FI], *bél* ‘flute made from grass’ [JgN], Mpn *bél* ‘reed growing in water; musical wind instrument made from the stalks of *bél*’; C 10 Azum *bola* ‘a tall coarse grass which stem may be a half inch thick’.

**218. C \*bVI-N- ‘flat/tomb-stone’:** 5 Pod *balama* ‘pierre plate pour fermer le tombeau’; 7 Zlg *beliη* ‘pierre plate qui couvre le tombeau’, Mbuko *bélélen* ‘pierre plat qui couvre le tombeau’, 7 Muy *bēlīm* ‘tombstone’; 10 cf. Dari *bèlè bēlē* ‘assiette, plateau’.

Deriv.: C 7 Mada *blah* ‘à plat’.

Caus. in *-s-*: C 10 Lew *blàs* (Masa, Marba *bàs*) ‘aplanir, rendre plat’ [LexC], Azum *blasa* ‘to make flat’.

//Cf. Eg *ybʒ* [if *ybl*] ‘Stein des Brettspiels’ [EG I: 62], Sem Akk *billu* (a stone) SB [CAD b: 229].

**219. \*HVbVI-/\*bVHVI- > \*bVI- ‘leather’:** C 5a Hdi *balì* ‘leather’, *balà-vəya* ‘human skin’ (*vəya* ‘body’). Cf. W 1 1 Hs *búulà* ‘to become skinned e.g. of inside of thighs from riding’, *búl-čè* ‘to abrade’.

Deriv. **\*bVI-k- ‘bark, coque’:** 5a Hdi *balà-ka-tavu* ‘bark’; 7 cf. Ould *ābēlīyá* ‘cosses d’arbre’; 9 Mbara *bólòkò* ‘bark, écorce’; 10 Musey *bolokɲa* ‘écorce, coque, coquille, cosse’ [ShyM], Gizey, Masa, Marba *búlók*, Ham, Musey, Lew *bólók* ‘écorce, coquille; enveloppe’ [LexC], Masa *būlòk-ηā*, Musey *būlók-ηā* ‘bark, peel’ [Shy]; E 1 Kera *balógi* ‘bark’.

**220. \*HVbVI > b/bVI- ‘thigh’:** C 1 Tera *bol* ‘thigh’, *bulbúl* ‘hip’ [NmT]; 9 Msg *bul* ‘Hüfte’, *bla* ‘Bein’ [LkM], *àbùl* [JgIb], Mnj *balak*, *bal* ‘cuisse’; 10 Gizey, Masa, Ham, Musey *bál*, Lew, Marba *ʔàbál* ‘cuisse’ [LexC], Azum *abalâ* ‘thigh’ (no pl.); E 1 Kwn *tòoból* (< *t-Hbl*) [JgIb] ‘thigh’.

One wonders, if *bVI-* could stem from a form with a body-part’ pref. *h-*<sup>32</sup>: *\*h-bVI-* > *hbVI-* > *bVI-*.

**221. \*HVbVI-/\*bVHVI- > \*bVI- ‘horn’:** W 2 Grk *bil*, Mnt *bulu* ‘horn’ [Fp], Grk *bál* [JgIb]; 3 Dera *bíli* [NmK], Bol *balù-m* ‘horn of an

<sup>32</sup> Cf. W. Leslau. A prefix *h-* in Egyptian, Modern South Arabian and Hausa. *Africa* 32/1, 1962, 65-68.

animal’, *bòlu-m* ‘horn (musical instrument made from animal horn)’ [GAB], Tng *bəl* ‘horn with 2 holes’, Krkr *bèeli-m* [GK], Ngm *bàlú* ‘horn’ [NEH], Kupto *bóolù-m* ‘horn, musical instrument’, Krf *balla* [JgIb], Glm *bàli* [SchV], Maka *bele-m* [NmM], *bèlé-m* [SvM]; C 7 Mol *abalan* ‘goat horn’ [FsM].

Forms in C 2: Bura *támbəl* ‘horn of an animal’ [BlB] and similar may follow *\*tV-m-bVI-* (a rare case of a two-prefixed form?).

//Om Ari *baali, baali*, Dime *bal-tu* ‘horn’ [BnA].

[HSED № 192].

For cognates of Eg *\*bjʒ* or *\*bj* ‘tusk or similar’ see [EDE II: 129f].

**222. \*bV(wV)l- ‘spotted, multicolored’:** W 6 WBade *bòolà-boolaan* ‘spots, spotted pattern’; C 8 Makari *bolbol* ‘spotted’ [AIM].

Denom. verb in *ʔa-*: *\*ʔa-bVI-* > *ʔVI-*: E 2 Lele *bāl* ‘être en plusieurs couleurs, to be multi-colored’, *bālé* ‘plusieurs couleurs’.

//Cush Burji *bull-anc-i* ‘grey, all mixed colors, spotted’ [SsB], Sem Akk *balālu* ‘to mix, brew beer, to knead, (in the stative) to be spotted, varieagated’ [CAD b: 39]. Cf. Sem *\*blbl*, *\*bwl* ‘mélanger’ [DRS: 51]. For Akk ‘to knead’ cf. C 7 Mol *bolay* ‘to knead’ [FrM].

The following isoglosses may relate:

**a. \*buHVI- > ʔVI- ‘yellow, brown’** (i.e. – ‘variegated?’): W 3 Bol *būl* ‘yellow’ [GAB]; 7 Fyer *bwèl* ‘rot, braun’ [JgR]; E 6 Mok *bólilé* ‘yellow’

//Cf. Sem Amh *bullā* ‘yellow, brown’ [SsB: 43], Cush Oromo *bullaa* ‘brownish (mule, etc.)’ [Grg].

**b. W 5 Grnt *mbàli* ‘red’ [Hr]; 6 Duw *bəl* ‘red.**

Denom. verb in *m-*: C 10 Dari *mbəl* ‘(se) rouiller, teindre colorer en rouge’, Dzpw *mbəl* ‘teindre, colorer’.

**223. \*HVbal- > Hbal- > \*bal- ‘strong, fat’:** W 1 Hs *búuléelèè* ‘very fat’; 2 Mghv *bál* ‘strong, forceful’ [BlM], Mpn *bál* ‘hard, strong’, Mush *bál* ‘to be strong’, *bál* (n.) ‘strenght, force’ [JgO], Chip *bál* ‘strength’ [Kr], Ngas *báal* ‘to recover, get well, heal’ [JgN]; 7 Mada *bòlòl* ‘gros, épais’; 8 cf. Makari *balao* ‘to be ripe’ [AIM]; E 2 Lele *bāl* ‘avec force’. An Arabic loan?

Denom. in *ʔa-*: *\*ʔa6VI-* > *\*ʔV6VI-* (compens. redupl.) 7 Mofu *-babəl-* ‘grossir, engraisser’.

//Sem Arab *ʔbl* ‘être gros, épais’, *ʔabil-* ‘gros, épais’, *ʔabalbal-* ‘grand,

fort, robuste, granite’ [BK II: 158f], cf. Berb Qab *bbebel* ‘être gros, replet’ [NZ: 54].

Consider the following isogloss as a root-variant:

C **\*bVI(VH)-** ‘fat’ adj.: 3 Bana *bálbál* ‘épais’; 6 Buwal *blòx<sup>w</sup>* ‘solid, fat’.

//Sem Tgr *balhit* ‘gros et épais’ (*blh*) [DRS: 66].

**224. \*baHVm- ‘to catch’:** W 2 Ngas *baam* ‘to take away, snatch, seize’ [JgN], Goem *báam* ‘to seize or take away smth by force’ [Hlw], Mghw *bam* ‘to catch’ [BlM], Mpn *bám* ‘to snatch’; E 5 Brg *bàamí*, Mig *báamó* ‘tenir, attraper’.

Derived nouns: W 1 Hs *búumà* ‘a fish-trap’, *búmà* ‘animal or bird trap’; 6 Duw, GBade *bamà* ‘hand fish trap’.

Cf. 3 Krkr *bámma* ‘net for carrying guinea-corn heads, fodder, etc.’.

**225. \*b[a]n- ‘to open’:** W 1 Hs *bányè* ‘to open, uncover’; C 7 Mofu *bán*, *béj* ‘troué, ouvert’, Mada *bbàj bbàj* ‘ouvertement, clairement’; 8 Makari *ban* ‘open, ouvert’ [AlM]; 10 Gizey *bù/òj* ‘ouvrir’, Azum *bon-gà* ‘to open wide (by removing the opening or covering)’; E 1 Kera *bìnyì* (vowel assim.) ‘to open’.

//ECush Bayso, Orormo, Arb *ban-*, Konso *pan-* ‘to open’, Had *ban-* ‘to separate, distinguish’ [SsB, Hay].

Cf. [HSED №212].

Deriv.: W 6 GBade *bà/àn-tu* ‘to make a small opening, open a little’, WBade *bàn-tu* ‘to open smth (eyes or curtains) allowing one to look through’, Duw *bàn-to* ‘to pull open, open by separating (bag, eyes)’.

Cf. **\*bVnn-/\*bVng-** (< **\*bVn-k-**) ‘hole’ (note a tenable semantic shift: ‘to open’ > ‘an opening’ > ‘a hole’): W 5 Zaar *mbuj* ‘hole in a trunk of a tree’; 5a EDng *béj* ‘le trou’, Mig *búnnè* ‘trou’; 5b Brg *bàngó* ‘trou’, Mubi *bàj* ‘bouche; porte’<sup>33</sup> [JgM].

Denom verb in *ʔa*: W 7 Bok *pibaŋ* (compensatory redupl.), Karfa *bwá:nây* ‘to widen hole’ [RC].

The following isogloss may also cognate (consider a tenable semantic shift: ‘to open (wide) > ‘to stretch’).

**a. \*ban- ‘to stretch; be wide’:** W 2 Mpn *ban* ‘to stretch, weiden’, Ngas *ben* ‘broad, wide’ [Fl, JgN]; 3 Tng *ban-de* ‘to lay, stretch across or along’; C 4 Gude *bwáj* ‘wide’; 3 FK *bwàn-gá* ‘wide, broad’.

<sup>33</sup> For ECh < AA *\*bnk* ‘hole’ see [TN №173].

//Cf. Eg *bnbn* ‘to stretch out’/‘(sich) ausstrecken’ (apud TN №163 ‘to stretch wide’, this form can not be found in [EG: I]).

**226. \*bi/an-** (sg. vers. pl.?) ‘to bathe’: W 3 Bol *binaa* ‘to wash, bathe’ [GAB], Ngm *bina* [NEH], Tng *pine* ‘to bathe’, Pero *binà* ‘to wash’, Dera *binà* ‘bathing’ [NmK], Kupto *finéy* ‘to bathe, take a bath’; C 5 Mlg *bára* ‘baden, waschen’, Glv *bar-*, Wnd *bar-a* ‘to wash’ [Jglb]; 6 Buwal *ban* ‘to wash’, Gavar *ban* ‘laver’, *bàŋ* ‘se laver’, Mina *bán* ‘to wash body’ [FrM]; C 7 Dugwor *mébéréy* ‘laver’, Muy *ábàrày*, Merey *bara*, Zlg *bara* ‘laver, nettoyer’, Ould *bā/ēriyà* ‘se laver’, Gis *bon* ‘sich waschen’, Vame *bun-*, Mbuko *banay*, Baka *báláy* ‘laver’ [BAS], Mol *balay* ‘to wash’ [FsM], Mada *ábàlá* ‘se laver, baigner’ (\**bVn-* > *bVr-* > *bVl-* ?); 7a Skn *banəvə* ‘to bathe’; 8 Makari *mban*, Kus *ban*, Log *bini* ‘se laver’ [Al], Zina *bànà* ‘to bathe’, Bud *béeno*, *byénnè* ‘waschen’ [LkBd], *bènú* ‘laver’ [Awg].

Deriv. C 7 Ould *bārāká* ‘laver la saleté de.; s’éclaircir’.

Deriv. in *m-* ‘to dump’ (Caus.): 3 Bol *mbùunu* ‘to dump dry substance’ [GAB].

Deriv. in \**ʔa-* (to cause bathing?): W \**ʔa-bwan* > *vway* (note *-w-* as an infix of pl.) ‘to wash, clean smth’: Goem *vway* ‘to wash or clean smth’ [Hlw], Mghv *vway* ‘to wash, cleanse’ [BIM], Ngas *vway* ‘to wash smth’ [JgN], Mpn *vwān* ‘to wash (hands, dishes)’, Mush *nvwang* ‘to wash’ [JgO]; 5 Grnt *vuni* ‘to wash’ (tr.) [Cs].

Cf. W 1 Hs *bùnaa* ‘permanently damp piece of ground’ (< \**ʔa-bun-*, ‘to be permanently washed’).

//Ch \**b-n-* ‘to wash, bathe’ [Nm], \**b-n* ‘to wash’ [Jglb], CCh \**bana* ‘wash’ (including Proto-Mafa \**pana* [GrR]).

For cognates of Eg *bn<sup>h</sup>n<sup>s</sup>* ‘baigner, plonger’ see [EDE II: 205f].

**227. \*bVn-** ‘to build’: C 6 Mina *bij* ‘to build’ [FrJ]; E 4 Sok *beeni* ‘to build’ [GrL]; 5b Mubi *beeni*, *béni* [Jglb], *béni*, *búnà* [JgM] ‘to build’. Cf. W 2 Ngas *bəŋ* ‘pen with a stone rampart’ [JgN].

Derived noun: \*(*k-*)*bin-* ‘hut, room’, *ban-* ‘village’ (pl.): W 1 Hs *béenée* ‘upper story of a building’; 2 Mnt *pin*, Grk *pin* ‘room’ [Fp, BLY], Goem *pin* ‘hut (in a compound), room (in a house)’ [Hlw]; 3 Krkr *bèenù* ‘hut, room’ [GAB], Bol *bìn* ‘hut, room’, *bònò* ‘house, compound’ [GAB], Dera *binò* ‘a distant town’ [NmK], Bele *bìn* ‘hut’, *bùnù* ‘compound, household’, Gera *bàná* ‘town’ [SchB], Ngm *bànà*

‘small village’, *bàno* [NEH], Maka *bìnò* [SvM] ‘compound, house’, Bure *bàan-dé* ‘compound, house’, Kupto *bànìn* ‘ward, hamlet; neighbourhood’; 4 Wrj *vin* ‘room’ [BIS]; 5 Dott *bən* ‘compound, house’, *ben* ‘grasshut, animal pen’ [CrD], Plc *bən*, Zul *bəni* ‘town, village’ [Cs №417-8], Geji *bəəŋ* town’ [Cs №417]. Grnt *biij* ‘house’ [Ja], *bo-biij* ‘husband’ [Hr], Guus *viin* ‘compound’, Zaar *viin* ‘hut, room’ [CrG, Z]; C 1 Tera *bán gar* ‘village’ (*garu-k* ‘wall’) [NmT]; 3 FK *vànà* ‘sleeping room for husbands’; 4 Bata *vəne* ‘case’ [Mo], Bch *vine* ‘hut’ [JgIb], FM *kù-vu*, FB *kù-vun*, Mwl *bìn-tí*, Nzn *vine*, Gudu *viin* ‘hut’ [Kr]; 5 Pod *vira* ‘chambre’, Mlg *bərə* ‘Haus, Raum’, Wnd *bere* ‘room’ [Voc], *búre*, *brè* ‘maison’ [WfN], Wnd *kú-vra*, Dghw *ká-viré* ‘cornbin’ [JgIb], 5a Hdi *viŋ* ‘boy's room’, Lmn *ivŋi* [ivèŋi] ‘hut, room’ [Wff]; 6 Buwal *bèn* ‘bedroom (for men)’, Mina *bín* ‘house’, *bij* ‘hut, room’ [FrJ]; 7 Gis *veŋ* [JgIb], Zlg *bír* ‘chambre de fils’, Merey *ber* ‘chambre à coucher’, Mol *ver* ‘chambre’ [FsM], Mofu *ver* ‘chambre’; 8 Log *vəni* ‘Hütte’ [LkL], Kus *vrio* ‘hut’, Makari *fin* ‘hut, nest’ [Al]; 9 Mnj *fùnú*, Mbara *fīŋ* (< \**k-bVn-*) ‘maison’; 9a Gidar *biina* ‘hut’ [Mo: 46], *biinà* ‘roof’ [FrG]; E 5a Mabire *ben* ‘house’ [JnH], Bid *bèenà*, Mig *béŋ* ‘chambre, case’; 6 Mok *biinó* ‘case en paille’.

Velarization of the initial (*b* > *-v/-f*) may be provoked by prefixes, typical of derived nouns (cf. C 4 FM *kù-vu*, FB *kù-vun*, 5 Wnd *kú-vre*, Dghw *ká-viré* ‘hut’). Note CCh *\*vin* ‘hut’ [GrR].

//Sem *bny* ‘to build, create’: Akk *banū*, Phn *bny*, Pun *bn?*, *bny*, Aram *b<sup>e</sup>nā*, Arab *banā(y)*, Ug *bnw*, Sab *bny*, Mhr *benu*, Soq *bene* [DRS: 71], Ug *bnt* ‘building, construction, creation’, Akk *binītu* ‘Gestaltung’ [DUL: 229], OffAram, Nab, Palm *bnyn* ‘building, construction’ [HJ: 178], Arab *biny-at-* ‘construction’ [BK I: 169], E Cush Som *beni* ‘hut’ [LIS], for Berb cognates see [AA 2 №112]. Note Eg *bnn* Totb ‘erzeugen o.ä.; generate, create’ [EG I: 460].

[Nm *\*bən*, JgIb *\*bn*, GrL: 297, Coh: 416, ISv: 15, HSED №261, 264].

**228. \*bVn- ‘to cook’:** W 6 WBade *bənu* ‘to cook tuwo’, GBade *bəŋ*, Duw *bəno* ‘to cook’.

Deriv. in *m-* ‘to burn’: C 2 Mrg *mbənà* ‘to burn’ [JgIb].

Caus. in *ʔa-*: **\*abVn- > *ban-* ‘to heat, make warm, burn completely’:** W 2 Goem *báan* ‘to make smth warm’ [Hlw], Mghv *báan* ‘verbrennen, versengen’ [JgS], 5 Dott *ban* ‘to heat up, warm up; burn’ [CrD]; E 3 Ndam *bənà* ‘bouillir (eau)’.

Deriv. **\*ban-** ‘hot’: W 2 Chip *bán* ‘hotness’ [Kr], Goem *ban* ‘hot’ [Fp]; 5 Dwot *banii* ‘hot, difficult’ [CrD]; E 3 Ndam *bàn* ‘chaud (comme feu)’. For W 2, 5 see [TN №166 *\*bn* ‘warm’].

**229. \*bVn(V?)**- ‘to pierce’: W 2 Mpn *byāḡ* ‘to pierce’, *byàḡ* ‘to prick’; 3 Krkr *bìn-tu* ‘to be pierced, pierce’. Cf. 5 Dott *boḡ* ‘to pierce’ [CrD]. Derived nouns: a. **\*bVn-** ‘sharp point’: W 3 Tng *bɔn* ‘arrow’; C 5 Lmn *mbàná* ‘spear’ [Wff]; 8 Log *bendəm* ‘Eckzahn’ [Luk], *vin* ‘molar tooth’ [AIL]; 9 Mnj *boḡ* ‘éperon’.

//Cf. Eg *bwn* (Pyr) ‘Bezeichnung der beiden Spitzen des Fischespeers’ [EG I: 455], for Eg-Tng see [TN №146].

b. **\*bVn-** ‘horn’: W 3 Gera *bena* ‘horn’ [SchB]; E 6 Mok *búnnò* ‘corne à siffler’.

//ECush Som *buun* ‘conch horn, horn’ [LIS].

**230. \*(?)bVn-** (< *yVbVn-*, a metath. variant of Sem (and AA) *\*byn*) ‘to know, to think’: W 2 Mghv *bèn* ‘to assume, think, hope for’ [BIM], Mpn *bén* ‘to think, discuss’; 3 Krf *ban-*, Grm *-ban-*, Dera *bán* ‘to know’ [JgIb], Gera *bîn-mí*, Bele *mbón-kò*, Glm *bán-àalá* [SchB], Pero *pénò*, Bure *ban-* ‘to know’; 5 Dott *bən* ‘to be able, know’, Bogh *mabāḡ* ‘to know’ [Cs №743]; 7 Fyer *ben* ‘denken’ [JgR], Monguna *ben* ‘to think’ [RC] (possibly, a loan from W 2); C 3 FK *mbàná* ‘to be able, can’ [BIFK]; 6 Mina *boḡ* ‘to think’ [FrJ]; E 4 Sok *ibene* ‘lernen’ [Luk]; 5a Mab *ibina* ‘to know’ [JnH], Mig *ʔibìnò*, WDng *ʔibìnè*, EDng *ibìnē*, 5b Brg *ʔibini* ‘savoir, connaître, comprendre’.

//Sem Ug *bn* ‘understand’, Hbr *byn* ‘understand, pay attention’ [DUL: 222, KB: 121], Arab *byn* ‘être séparé; être clair, lucide, vident’, II stem ‘expliquer’ [BK:186], Geez *bayyana* ‘distinguish, notice, recognize, decide, judge’ > ‘make clear’, Eth *byn* ‘become evident, decide’ [LsG: 115f], Phn *bnh* ‘intelligence’ [HJ: 173]. Arab *ʔbn* ‘juger, se former une opinion de qqch’ [BK I: 6].

For Geez ‘to make clear’ cf. WDng *béèḡè* (< *byn*) ‘éclairer avec du feu’ [HSED №275].

Accord. To [GrR], CCh FK *mbàná*, 4 Sharwa *mban* ‘capable’ and 7 Gemzek *mambana* ‘be capable’ follow CCh *\*mba* ‘to be able’.

**231. \*bi/un-** ‘bran’: W 3 Bol *biinà* [GAB], Dera *bíinà* ‘bran’ [NmK], Kupto *bìinán* ‘sorghum sp.; chaff’; 6 Duw *viinau* ‘bran’ (note *\*bin-* >

*vin*); C 2 Bura *bina* ‘outside shell of guinea-corn’ [BIB], Mrg *bíná* ‘bran’ [HfM: 22]; 5 Pod *bina* ‘son de mil’; 9 Mnj *bāraa* ‘son de mil’; 10 Dzpw *bàinà* ‘son (mil)’, Dari *bāynā* ‘son de céréale’, Musey *banana* ‘son de grain’ (int. –*a*- pl.) [ShyM]; E 2 Lele *binā*, *bìn-dā* ‘son’; 5a EDng *bùnyā* ‘la bâte, la capsule du grain’, WDng *búnyà* ‘balle du grain’.

For W 3 Kupto ‘sorghum sp.’ cf. E 2 Lele *bèné* ‘k of sorgho’, 3 Ndam *biné* ‘sorgho’.

For a denom. verb in *ʔa*- see W 5 Grnt *boŋi* ‘to peel’ [Hr].

//ECush Som *buunše* ‘husk’ [LIS], Berb Ghad *bina* ‘dêchet de mouture de mil’ (< Ch) [NZ: 73].

**232. \*bin- ‘feather’:** W 7 DB *b(i)yàŋ* (< *bi-a-ŋ*, internal –*a*- pl.) [RC], *bâŋ* [JgR] ‘feather’, Mangar *bâŋ* ‘feather, leaf’ [RC]; C 4 Jimj *bínún*, Sharwa *bíbīʔín* ‘feather, wing’, Gude *bíbinà* ‘feather’ [BrJ]; E 3 Ndam *dá-biny* ‘plume’.

a. **\*bin- ‘arm’:** W 7 Fyer *beŋ* [JgR]; C 1 Tera *bən* [NmT], Jara *binna* [Meek].

//Cf. Om Shin *bangá*, Zayse *paange* ‘Feder, Flügel’ [LSh].

Cf. [HSED №211].

**233. \*bVn(n)- ‘field, farm’:** W 2 Mghv *bóŋ* ‘farmland (around the compound)’ [BIM], C 9 Mnj *boŋor* ‘butte de terre’; E 5a ‘EDng *bāŋàŋ* coll. ‘les champs de sorgho’; 6 Mok *bóni-só* ‘parcelle de champ à cultiver’ (-*so* is a suff. of sing.)

Denom. verb in *\*ʔa-: \*ʔabVŋ- > ʔVŋ-*: W 2 Mpn *byāŋ* ‘to start farming for the first time’.

Derived noun: C 10 Musey *banayŋa* ‘grande houe pour faire les sillons’ [ShyM].

//Eg *bn.t* (n) ‘Art Acker’ [EG I: 458]; ECush Som *ban* ‘field, plain out of doors’ [LIS], Sem Arab *bunan-at-* ‘jardine riche en plantes et en fleurs’ [BK I: 166]. Consider the following forms as Arabisms: W 2 Mghv *boŋ* ‘garden’ [JgS]; 7 Bok *bìbin* ‘Garten’ [JgR].

**234. \*ban- ‘kind of band, leather apron for men’:** W 2 Ngas (*m*)*bèné* ‘apron (made of leather) for man’ [JgN], Mush *byàn* ‘leather apron’ [JgO]; E 2 Lele *banya* ‘cache-sexe masc.’; 6 Mok *báané* ‘ceinture en peau d'antilope’.

//Eg *wbn.t* Sp ‘Name der Mumienbinde für die Stirn’ [EG I: 294].  
May be cognate with the next root.

**235. \*bVnn-/\*bVwVn- ‘rope, tendon, net’:** C 7 (compensatory redupl.) Merey *bəbàŋ* ‘corde avec laquelle on lie le boeuf’, Mofu *bébeŋ, bábaŋ* ‘muselière (pour les moutons)’, Zlg *bwànwá* ‘cache-sexe de fibres’; 9 Msg *boane* (< \**bwn*) ‘Netz’ [LkM]; 10 Dzp *bōŋ* ‘bride (cheval)’, *bēŋ* ‘filet fin’; E 6 Mok *bónné* ‘corde’; E 5a WDng *bínyinyò* ‘nerfs du corps’, Mig *bínnyè* ‘tendon’. Cf. E 3 Tum *bēŋ* ‘piège sp.’.

//Cf. Cush Saho *baanto* ‘kind of vegetal rope; tendon’ [Vr].

Denom. verb in \**a-*: \**aban-* > \**ban-* ‘to tie’: C 7 Mbuko *bán* ‘lier, attacher’, Merey *bar* ‘lier’; 8 Log *bunun he* ‘fasten bind (load)’, *bán* ‘binden’ [AIL, LkL], Kus *ban he* ‘to tie, fasten, bind’ [ALK]. Cf. Bud *pēnai, fenai* ‘to tie’ [LkBd].

Derived noun: C 5a Hdi *banava* ‘belt’; E 2 Lele *bèndè* ‘filet sp’.

//Berb Ghad *aben* ‘attacher une bête à un point fixe’, Ahag *ahen* [NZ: 72]. [AA 2I № 113: Logone, Berb].

**236. \*buwan- ‘God, sky, rain’:** W 5 Guus *von* (< *bwVn*) ‘rain’ [CrG]; C 9a Gdr *bùwàn, bùná* ‘rain’ [FrG]; E 4 Mawa *bwán* ‘God, sky’ [RbM], Ubi *bwane*, Mawa *buan* ‘ciel’ [HuJ]; 5a Mabire *boŋ* ‘ciel’ [HuJ], EDng *búŋ* ‘le devin, le mystérieux, dieu’, Mig *búŋ* ‘dieu de pluie, ciel’, Bid *bùŋ* ‘Dieu’, 5b Mubi *bùn* ‘sky’ [Luk], *bùn* ‘God’ [JgM], Jegu *bóŋ* ‘Himmel, Gott’, Tor *bùŋ* ‘Dieu’.

Cf. C 10 Dzp *bùŋōr* ‘arc-en-ciel, pluie’.

[ISv: 15: Gdr, Msg, Mubi, cf. HSED №326, EDE II: 162].

**237. \*bVn- ‘bad’:** W 5 Tala *bonnu* ‘bad’ [Cs], E 4 Sok *bénaa* ‘hässlich, schlecht’ [Luk]. Cf. W 3 Kupto *bòné* ‘hard, tough, punishment’, derived verb: *bònì-téy* ‘to punish’.

a. \**bVn-* ‘to be cruel’: W 3 Tng *bana* ‘anger, rage’; 5 Zaar *bəən* ‘to be arrogant, quarrelsome’ [CrZ]; C 4 Gude *mbiinə* ‘to behave cruelly’; 5a Mig *bòŋ-sò* ‘se facher’.

Derived noun: W 1 Hs *bùunaa* ‘a fierce, hot-tempered, quarrelsome person’. For a link between ‘bad’ and ‘cruel’ see Eg.

//Eg *byn* (AR) ‘schlecht’, *byn* Nä ‘die Böse’ [EG I: 442f].

[ISv: 20: Eg-Sokoro, HSED №263].



blink' [LIS].

For Geez *bəruh* 'happy' cf. CCh 3 FK *mbàrìvà* 'lucky'.

Note a possible derived noun: **\*bur-** 'day, morning': C 10 'day': Gizey, Masa, Lew, Marba *bùr*, Ham, Musey *bùù*, Masa, Lew, Marba *bùr* [LexC], Azum *burà*; E 5b Mubi *bùrbùrù* 'morning'.

//Cush Afar *beeraa*, Saho id., Oromo *bóru* 'der Morgige Tag, Morgen' [RA], ECush Som *bari*, Rend *ber'i* 'east' [Sam], Arb *barri* 'dawn, tomorrow' [Hay], Ong *bē'ri* 'to dawn', *baram* 'tomorrow' [FIO], *baram* 'tomorrow' [SaT], SOMot Hamer, Kara *bu(u)ri* 'be morning' [BnA].

The following cognates stem from a root-varian (cf. Sem *\*brr*, *\*brh* vers. *\*bhr*).

a. **\*ḅVr-** (< **\*bHr**) 'to shine': C 4 Gude *bəṛə* 'to shine, be bright'.  
Deriv. C 3 Bana *b(ə)rali* 'étinceler'

Derived nouns: W 3 Bol *bebire* 'sparks' [GAB]; 7 Bok *byáar* 'Stern' [JgR].

//Sem Hbr *bāhīr* 'clear', Aram *bəhar* 'be clear', Syr (*ša*) *bahar* 'to glorify', (Mand) *bhr*, *bar* 'to shine' [LsG: 103f], Arab *bhr* 'surpasser (en beauté, en bravoure); 'briller par qq qualité, briller parmi les autres' [BK I: 170].

Alternatively, Ch **\*ḅVr-** may cognate with Eg *bʾ* [if *ʾbr*] D18 'funkeln, leuchten (von der Sonne und von funkelnden Gegenständen)', *bʾ* Gr 'Licht' [EG I: 177], Om Kafa *borea* 'Licht' [RK].

[AA 2 №115, HSED №327].

**240. \*b[a]r-** 'to cover, to wrap': C 2 Bura *barwa* 'to wrap an object inside smth.' [BIB]; 7 cf. Ould *-vār* 'couvrir d'une toit' (irreg. *v-*); 9 Mbara *bār* 'couvrir une maison, to thatch', Mulwi *biri* 'étendre (un tissu), couvrir (avec un tissu)'; 10 Ham, Masa, Gizey *bār*, Musey *bàà* (< *\*bar#*, compensatory lengthening of the vowel) 'couvrir avec tissu' [LexC], Azum *barà* 'to cover smth.', Masa *bār* '(se) couvrir' [CC], Musey *baara* 'couvrir' [ShyM]; E 5a WDng *bóòrè* 'couvrir'.

Derived noun: C 7 Mbuko *vévar* (< *bVvVr* < *bVbVr*) 'toit, roof'

//Berb Qab *sburr* 'se couvrir', Mzab *bberber* 'couvrir', Ghad *berber* 'être couvert, enveloppé', Ahag *beruberet* 'couvrir', NIG *barbar* 'fermer', Ghat *sberber* 'boucher' [NZ: 91].

Cf. [TN №191].

For Ghat 'boucher' cf. E 5a EDng *bār-dē* 'boucher un petit trou ou une fente, colmater; aveugler'.

For a ‘Wanderwort’<sup>34</sup> cf.: Ch W 1 Hs *bàrgoo* ‘blanket’, C 7 Mafa *boruk<sup>w</sup>a* ‘couverture’ (a loan), E 1 Kera *bòrgó* ‘Decke’ (a loan). C 5 Mlg *bàrk<sup>w</sup>a* ‘Decke’, Pod *bàrakwa* ‘couverture’, Wnd *barkwa* [Voc]; 7 Zlg *bàràgwa*, Ould *bàrkù* ‘couverture’, also Saharan Kanuri *borko*, Tubu *borgo*, Sem Amh, ECush *bullukko* ‘blanket’ [SkH: 17].

**241. \*bar-** ‘to make love, marry’: W 4 Paa *bar* ‘to marry’ [MS]; C 1 Tera *bəri* ‘to marry’ (irreg. initial) [NmT]; C 5a Hdi *baray* ‘to seduce’; 7 Mofu *-mbər-* ‘faire l’amour, coïter’, Chuv *mémbrèy* ‘faire l’amour’; 10 Dzpw *bàr* ‘cohabiter’.

Derived nouns: W 1 Hs *bàrbàráa* ‘copulation of birds or animals; keenness, eagerness’, *búuri* ‘longing, keen wish’; C 7 Mol *obor* ‘lust’ [FsM].

//Cf. Berb Ghad *ebr* ‘vouloir, désirer’ [NZ: 90].

**242. \*bi/ur-** ‘to dig’: 5 Zul *bori* ‘to dig’ [Cs №788]; E 2 Lele *biür* ‘to dig’ [Jglb].

Derived verb: E 5a EDng *bòrsē* ‘labourer la terre (phacochère)’.

Derived noun: **\*bur-** ‘grave, pit’: W 3 Kupto *fúré*, Pero *púré*, Tng *pure*, Ngm, Dera *bùrè* [NEH, NmK], Bol *bùre* ‘grave’ [GAB]; C 7 cf. Muy *bür-zùm* ‘hole where pot-clay or building-clay is extracted’; E 5a EDng *bùri* ‘ancien trou de puits’.

Denom. verb in *ʔa-*: 5a Mig *ʔàbìrò* ‘déterrer, creuser un trou avec les ongles’.

Derived noun: W 1 Hs *búr-sò* ‘hole in the ground used as a fireplace’

Derived noun **\*bVr-m-** ‘pit, burrow’: W 1 Hs *bàramii* ‘an excavation, mine’; 3 Bol *borom* ‘burrow (esp. - in termite hill)’; C 7 Mbuko *bérom* ‘trou (que l’on creusé), nid d’une poulet’.

Denom. verb: E 5a Mig *bàrmò* ‘élargir (trou)’.

//Sem Arab *bʔr* (u) ‘creuser un puits, une fosse, cacher’ [BK I: 79], Sab *bwr* ‘grave’ [SD: 33], Hbr *bōr* (< *bʔr*) ‘hollow dug in the ground in which to cook’ [KB: 114], Sem *\*bi/uʔr-* ‘well, cisterne’: Akk *būrtu* MR, SB ‘well, cistern; fish pond, waterhole; hole, pit’ from OB on [CAD b: 335], OAram *byrʔ*, Imp *bʔr*, Sab *bʔr*, Hbr *bəʔer* ‘puits’, Arab *biʔr-* ‘puits’, *buʔur-* ‘fosse’, etc. [DRS: 41, LsG: 102, cf. Kg: 192]. ECush Oromo *bor* ‘to dig’ [Grg], Om Dime *burbur*, Hamer *bar* ‘hole’ [BnA], Berb Ghad *i-ber* ‘canale, rigole d’irrigation’ [NZ: 91]. Cf. Eg

<sup>34</sup> note, however, that Ch forms (labelled as loans) look like derived nouns in *-k-*.

*bʕbʕ* ‘Loch’ and *bjʒ* ‘Bergwerk’, for all possible cognates see [EDE II: 56-63, 122-125].

//Coh: 384, AA 2 №142 \**bʕr* ‘pit, well; to dig’: Tng, Lele, ron, HSED №319 ‘dig’, №164 ‘pit, well’].

**243. \*(m)bVr- ‘to jump, to fly’:** W 1 Hs *biraa, bura* (irreg. initial, probably motivated by the semantics) ‘to jump, hop’; 6 Daba *mbàr* ‘voler, s’envoler, sauter’, Mbedam *mbàr* ‘to fly’ [LMb], Gavar *mbir* ‘sauter’, Mina *mbir* [FrJ], Buwal *mbēr* ‘to jump’, Musgoi *mbir* ‘s’envoler’ [Mo: 30]; 7 Ould *bàr* idf. ‘bruit de vol’; 8 Zina *bùyrà* ‘to jump’ (internal pl.?); 9 Mlw *biri* ‘voler (oiseau)’, Mnj *bára* ‘s’envoler’ [Mo: 30]; E 1 Mobu *bàré* ‘to jump’, Ngam *bré* ‘voler (pour oiseau)’; 4 Barein (dial. Jalkiya) *béeró* ‘to jump’; 5a EDng *béré* ‘sauter en dansant’; 5b Mubi *bir* ‘voler (pour oiseau)’ [JgM], Brg *bèri* ‘voler’.

Derivatives: C 4 Gude *bàrà-dä* ‘hopping on one foot’; 7 Merey *mbàr-za* ‘sauter’.

Note possible derived nouns: C 7 Mada *mábráh* ‘chauve’; E 5a Bid *bùrbùrum* ‘ver sp. (volant)’.

//Sem Geez *brr* ‘to fly, run fast’, Tgr *bàrra*, Tna Harari *bàràrà*, Gur, Amh *bàrràrà* ‘to fly’ [LsG: 107], Jib *ebéré* ‘to jump’ [JnJ], ECush Burji *burr-*, Saho *ibrir* ‘to fly’ [SsB], Ong *barara* ‘to fly’, HECush \**barar-* ‘to fly’? (but a loan) Oromo *barara*, Gede’o *birret-*, Had *barar-*, Kamb *burriy-* ‘to fly’ [Hds]; Kemant *bàrt-* ‘to jump’ [ApAg]. For Geez ‘to run fast’ cf. W 1 Hs *bàaburà* ‘to gallop a horse quickly’. Cf. 3 Kupto *bàrè* ‘dance sp.’; C 7 Ould *bàràkw* ‘danse d’un cabri’ [AA 2 №119 \**bVr* ‘to fly, to jump’, HSED №291, TN №1879 \**br* ‘to jump’].

The following insect names may be derived from ‘to fly’/‘to jump’:

a. \**bVr-* ‘a fly’: W 5 Zaar *bàram* ‘a fly’ [CrZ]; C 7 Mofu *béber* ‘taon’, E 5b Tor *bèreera* ‘papillon’, cf. also W 3 Krkr *barmažè* ‘horse-fly’; C 8 Makari *abra-susu*, Log *barababiyo* ‘dragonfly’ [Al].

//Cf. Om Bench *bur* ‘fly (of the biting type)’ [LmW: 320].

b. W 3 \**m-bVr-* ‘bee’: Bol *mboori* ‘bee which makes honey in a hole in the ground’ [GAB], Kupto *mbiriiri* ‘mason wasp’. For confusion of semantics ‘fly’ & ‘bee’ see SCush.

//SCush rift \**baʔara* ‘flies’: Irq, Gor *baʔar* ‘flies’, Alg *baʔara* ‘flies, honey bees’, \**baʔarimo* ‘fly’ (with suff. *-imo* for singulatives): Irq

*ba'a(a)rmo*, Gor *ba'armó* 'fly, honey bee', Bur *ba'arimoo* [Kies].  
 c. C **\*(m-)bar-** 'locust, grasshopper': 6 Daba *màbàrà* 'kind of criquet' (clearly derived < Daba *mbàr* 'voler, s'envoler, sauter'); 10 Gizey Masa *bár*, Ham, Musey *báa*, Lew, Marba *'àbár* 'criquet sp., sauterelle' [LexC], Musey *baara* 'locust' [ShyM], Azum *abárá* 'edible grasshoppers'.  
 //Berb MC *aburri*, Sen, Rif *abarru* 'criquet', Izn, Snus *aberru* 'sauterelle' [NZ: 95]. A loan from the masa gr. to Berber is likely.

**244. \*bVr-** 'to cut, chop': C 4 Gude *burə* 'to chop, hammer'; 9 Mnj *biri(bara)* 'taller' ('tailler?') [TrMnj: 62], E 2 Lele *bòr* 'casser, couper'.  
 Derivatives: W 1 Hs *abàarà* 'large round-bottomed dug out canoe as used by the Kakanda tribe'; E 4 Mawa *bəra* 'bois coupé'.  
 Derived verbs: C 5 Pod *birəkə* 'ciseler'; 7 Ould *-bàrà̀m* 'couper plusieurs plantes à la fois', Mada *àbràč* 'ronger, fendiller'.  
 Derived noun: a.W 1 Hs *béerà* 'a small razor used in tattooing'.  
 //Sem Arab *brw* 'dégrossir avec une hache' [BK I: 119], Hbr *brʔ* D-stem 'cut down (forest)' [KB: 147], Pun *brʔ* 'graveur (?)' [DRS: 80].  
 b. cf. C 1 Tera *mbir* 'sore, plaie' [NmT]; 10 Dari *mbír* 'wound'  
 //ECush Sam (Som, Rend) *\*nabar* 'sign cut into skin' [Sam].  
 For Sem Pun *brʔ* 'graveur' cf. C 3 FK *bàvìrə* 'scar, mark on the body'; E 4 Mawa *burus* 'cicatrice'; 5a EDng *bīrčò* 'la cicatrice'.  
 For a root variant see the next issue.

**245. \*bVHVr- > \*bVr-** 'to tattoo, cut': W 3 Tng *berì* 'to cut round, circumcise', Glm *bár-* 'to cut off; slaughter (by cutting throat)' [SchB], Kupto *bèbiréy* 'to cut into small pieces'; C 6 Daba *bòr* 'tatouer comme marque tribale or signe de beauté'; 10 Ham, Marba *bír*, Musey *bíí* (< *\*bír*, compensatory lengthening) 'graver du bois, scarifier', Gizey, Masa *bír* 'inciser, tatouer', Gizey, Masa, Ham *bír* 'scarifier' [LexC]; E 5a WDng *bòr* 'tatouer', Bid *bòr* 'fendiller, fissurer'.  
 Derived noun: W 3 Pero *bérà* 'face cutting'.  
 Derived verbs.: W 3 Kupto *bèr-téy* 'to cut, slaughter; to stop (a child from breast feeding)'; 6 Duw *bár-nìyo* 'to cut open (fish, fowl)'; E 1 Kera *bír-lí* 'to tattoo'; 5a EDng *bīr-čē* 'ébrancher, élaguer'.  
 //Sem Arab *bħr* 'fendre, déchirer (se dit de la pratique de fendre l'oreille à une chamelle)' [BK: 88], ECush Dah *bīir-* 'to cut grass, mow' [Eh: 138]. Cf. [HSED №188].

**246. \*bVr- ‘to insult’:** W 3 Bol *bàriyà* ‘admonishment, scolding’ [GAB]; 5 Grnt *bari* [Ja], Dott *ber* ‘to abuse, insult’ [Cr], Zaar *ver* ‘to insult’ [CrZ]; C 7 Mafa *bàra* ‘insulter’.

//Cush Afar (Saho, Oromo id.) *abaar* ‘fluchen, verfluchen; curse’ [RA], Oromo *abbaara* ‘curse, scold’ [Grg].

The following forms may relate: C 7 Mada *ómbròv* ‘dénigrer, critiquer’//Sem Arab *ʔbr* ‘calomnier ou diffamer un absent’, *ʔibr-at-* ‘méchanceté, médisanse’ [BK I: 3f].

**247. \*bVr- ‘to drill a hole’:** W 3 Dera *borè* ‘to make a hole in’ [NmK], cf. Glm *mbàry-àalá* ‘to stab’ [SchB]; C 7 Muy *ábàr* ‘to drill a hole by turning a bit’, cf. Ould *bàràf* idf. ‘action de percer qqch’.

Derived noun: W 3 Bol *bèrem* ‘hole into which water of a pond is drains, leaving fish exposed’ [GAB].

//SOM Hamar *bar*, Dime *burbur* ‘hole’ [FIA].

Derived verbs: C 7 Mafa *búrc-* ‘percer (un mur)’, Mofu *-vávàrk<sup>w</sup>-* (< *bávàrk<sup>w</sup>* < *-bábàrk<sup>w</sup>-*) ‘percer qqch dur’.

//Cf. Eg *wbʔ* [if wbr] ‘bohren, öffnen’ [EG I: 290]. Sem Geez *brr* ‘pierce, penetrate, go through’ > ‘passage’, Amh *bàrràrà* ‘pierce, make a hole in a water jug’ > ‘door, gate’, Tgr *bàrabàra* ‘pierce’, Hbr *bārūr* in *hes bārūr* ‘penetrating arrow’ [LsG: 107], note Hbr *brr* qal ‘polish, point (arrow)’ [KB: 156]. For Sem ‘penetrate, point an arrow’ and Ch ‘to pierce’ see the next isogloss (though, the common origin is not doubtless):

**a. \*m<sup>ʔ</sup>a-bVr- arrow’:** W 5 Guus *mbàrà* ‘arrow, sting, quill of insect’, Zaar *mbàrà* ‘arrow’ [Cs]; 7 Mundat *àbàbar* ‘arrow’ [RC]; C 9 Msg *bàrau* ‘Pfeil’ [LkM], Mnj *baraw* ‘arrow’; 10 Masa *bàraw* [Mo: 53], Musey *mburura* [ShyM], Gizey *bùr* ‘arrow’ [LexC]; E 1 Kera *abooro* ‘arrow’.

Denom. verb in *ʔa-*: *ʔabar-* > C 7 Mol *bar* ‘to shoot an arrow’ [FsM]. Cf. also W 1 Hs *bàaraa* ‘shooting’.

For Guus *mbàrà* ‘arrow, sting, quill of insect’ cf. Sem Arab *ʔbr* ‘piquer (scorpion)’, *ʔibr-at-* ‘aiguille’ [BK I: 3].

**248. \*bVVr-/\*bVr- (< \*baHar-) ‘to hunt, hunting’:** W 1 cf. Hs *bàaraa* ‘aiming, shooting at an onject’; 2 Grk *bàr* ‘to hunt’ [BIY]; 3 Bol *bàrà* ‘hunting, fishing’ [GAB], Dera *bàrà* ‘hunting’ [NmK], Ngm

*bàarà* ‘hunting’ [NEH], Maka *bàarà* ‘to hunt’, Krf *bar-* ‘to chase, hunt’, Dera *barà*, Grm *ɲbara* ‘to hunt’ [SchV], Krkr *bàaràa* ‘hunting, festival’ [GK], Pero *pàrà* ‘hunt’ n., Kupto *fàrà* ‘hunting with spear’, Tangale *pari* ‘look for, search’, *para* ‘hunting’; 6 Ngz *bàrú* ‘to hunt’ (< Kanuri *bara* ??), Duw *bàarà* ‘hunting’; C 1 Tera (dial.) *bərə* ‘hunting’ [Kr]; 2 Bura *bara* ‘to seek, want, be in love’ [BIB], Bura *bàrà* ‘suchen, jagen, wollen’ [HfB], Chb *bàrà* ‘suchen, jagen, wollen’ [HfC], *bàrà-ntàkù* ‘hunting’ [Kr]; 7 Vame *bər-* ‘chasser’, *bər-* ‘to catch’; 10 Azum *berá* ‘to hunt on foot, in the heat of the day when the animals are resting’, Musey *beera* ‘la chasse, aller faire la chasse’ [ShyM], Gizey, Masa, Ham *bér* ‘chercher’ [LexC]; E 1 Kera *bééré* ‘to hunt’; 5a WDng *bàriyè* ‘aller chercher’; 6 cf. Mok *bèerè* ‘enquête, surveillance (en cachette)’.

For C 2 ‘to seek, hunt, want, be in love’ cf. №241. **\*bar- ‘to make love, marry’**.

Deriv. W 3 Ngm *bàr-tâ* ‘look for, seek out’ [NEH]; C 2 Bura *bara-ta* ‘suchen’ [HfB: 295].

Deriv in *-g-*: C 9 Mlw *bìrgì* ‘chasser, faire la chasse’, Mnj *birgi* ‘chasser’; E 6 Mok *bôrge* ‘chasser (animaux)’. Cf. C 8 Makari *birži* (< *birgi*) ‘fishing net’ (note Akk, Sab ‘to fish’) [ALM].

Derived noun: W 1 Hs *búréeree* ‘bird snare’; C 5 Pod *bəra* ‘filet de pêche’; 6 Gavar *ma-bar* ‘filet’.

Derived noun in *-m-/-n-*: W 1 Hs *bàramii* ‘bird-snare’; C 5a Hdi *barum* ‘handmade tool to catch grasshoppers’; 10 Lew, Marba *bìrím* ‘nasse à poisson’ [LexC]; E 5a WDng *bàarnè* ‘grand filet’.

//Sem Akk *baʾaru* ‘to catch (fish, birds), to hunt’ from OB on [CAD b: 2], *na-bāru*, *na-bār-tu* ‘trap, cage’ [CAD n<sub>1</sub>: 21], Soq *bʾr* ‘to fish’, Mhr *biter* (T-stem) [LsS: 92, DRS: 41], Amh *abarrārār* ‘chase’ [Hds].

Emphatization of *b-* (observed in a few Ch languages) and a long root vowel point to a "weak" laryngeal (ʔ or ʕ) as C<sub>2</sub> on the PCh level.

Nilo-Saharan Kanuri *bara* ‘to hunt’, lacking an etymology, is rather a Ch loan.

[StH №VIII.2]. Cf. **\*pVr- ‘to hunt, to search’**.

**249. \*bVr- ‘(to) fear’**: W 5 **\*bVr-t-** ‘fear’ n.: Jimi *bwattóo* (assim. < *bwarto*), Plc *bár-ti*, Zul *bər-ti* [Cs № 431], Zaar *vər-tá* ‘fear’ [CrZ], Dott *bər-ti* ‘to have fear’ [CrD]; C 5 Pod *mbəra* ‘to have fear’; 7 Ould *mbāmbār* ‘peur, fear’; E 5a WDng *bàariyè* ‘craindre’.

//Berb Qab *abrari* ‘crantif’ [NZ: 94], Sem Geez *barʿa* ‘tremble, shake’ Tgr *bārʿa* ‘fear’ [LsG: 101], Syrian-Arab *barbaʿ* ‘frighten’ [LsG: 101]. For WDng-Qab-Tgr see [TN №221].

For W 1 Hs *bári* (< *bHr*) ‘shivering, trembling (whether from cold, fear, joy, or anything else)’ cf. Sem *\*bhr* > Arab *bhr* ‘être saisi et enterdit de frayeur’ [BK I: 88], Geez *bahrara* ‘to be startled, fear, frightend’ [LsG: 92].

**250. \*bVr- ‘to spread, extend’:** W 2 Mghv *bígir* (internal *-k-* pl.) ‘to expose, spread’, *bwæer* ‘to spread open’; C 5 Pod *mbála* ‘étendre, spread out’; 9 Mnj *biri* ‘(s) étaler’, Mlw *biri* ‘étendre (un tissu) couvrir avec un tissu’; 10 Musey *baara* ‘étendre, tendre’ [ShyM], E 5a Bid *birrày* ‘étendre (habit, tissu)’.

Deriv.: C 6 Buwal *blè-k* ‘to spread over’.

**251. \*bVr- ‘to help’:** W 3 Krkr *mbìru* ‘to save’ [GK]; 4 Miya *bər* ‘to help, save’ [Sch], Paa *mbùre* ‘to help’ [MS], Siri, Mburku *bur*, Tsagu *buru*, Miya, Jmb *mbur* ‘to help’ [SkNB]; 5a Hdi *mbəray* ‘to support’; 6 Mina *mbəl* ‘to help’ [FrJ]; 7 Baka *mé-mber* ‘care for’ [BAS], Mol *mbar* ‘to heal, cure, care for’ [FsM], Vame *mbàrà* ‘to care for, take care’ [GrR].

Note №255. *\*(m)bVr-* ‘to recover’. Terms for ‘to help, to cure’ and ‘to recover, to cure’ are confused in CCh.

**252. \*bVr- ‘to separate, detach’:** E 4 Barein (dial) *báaró* ‘to separate’. E 1 Kwn *ábáré* ‘dénouer, détacher’. Cf. C 3 Bana *vri* (< *\*-bri* ‘be separated’) ‘champ partagé parmi co-épouses’.

Derived noun: W 2 Ngas *byàar* ‘forked stick’ [JgN].

Derived noun ‘part’: C 9 Mnj *bəriy* ‘part’; E 6 Mok *bár-tà* ‘moitié’.

Derived verb: *\*bVr-ḵ-* ‘to separate (people), select’: C 6 Buwal *vrè-ḵ* (regressive fricativization) ‘to separate out’, 7 Mafa *vər-ḵ-* ‘démarier, séparer des personnes; lancer une pierre pour éloigner qqn)’.

//Sem Geez, Hbr *brr* ‘separate, choose, select’, Arab *brr* VIII ‘be separated from one’s friends’, Aram *bərar* ‘separate, choose’ [LsG: 107], Cush Bilin *babar* ‘trennen’ (< Arab?) [RB]. For Sem ‘choose, select’ cf. ECh 2 Lele *bār* ‘choisir’.

a. W 3 Tng *beréi* ‘between’; C 8 Makari *boro* ‘distance between two rows of plants’ [AlM].

//Sem Akk *biri, beri, bari* ‘between’ from OA on, *birītu* ‘in-between terrain, alley, balk (between fields)’ = *bīru* from OAkk on [CAD: 246, 252, 266].

For a root-variant cf. Sem *\*bhr*: Akk *bēru, beḫēru* ‘select, choose’ from OAkk on, Hbr *bāḫar*, Aram jp. *bēḫar*, Sab *bḫr* ‘élire’ [DRS: 56, CAD b: 212] and Ch *\*vVr-* (< *v-H-r* < *b-H-r*) ‘to choose’: C 9 Mnj *virī* ‘trier’; 10 Musey *vaara* ‘trier; choisir, ramasser; essayer’ [ShyM], Azum *vara* ‘to select (from among others)’; E 1 Kera *vèrè* ‘to choose’. Cf. [HSED №187].

**253. \*bVr-** ‘to sleep, spend the night’: W 1 Hs *bárčli* ‘sleep; death’; 3 Tng *burbura* idf. ‘sleeping’; C 10 Dzpw *bàr* ‘dormir, se coucher’, Ham, Musey *bùù*, Gizey, Masa, Lew, Marba *bùr* ‘passer la nuit’ [LexC], Musey *buuna* ‘passer la nuit, séjourner, coucher’ [ShyM], Masa *bùr* ‘coucher, poser’, Azum *burà* ‘to lie down (asleep)’. //Cf. ECush Rend *bary* ‘to sleep (at a place)’ [pG], Arb *barj-* ‘to sleep’ [Hay].

**254. \*(m)bVr-** ‘to tear’: C 2 Klb *mbar-* ‘rip, tear’ [MuK]; E 1 Mobu *bàré* ‘arracher’.

Derived verb in *-ḫ-* ‘to tear off’: C 7 Mafa *bārḫ-* ‘arracher (une branche d'arbre)’; 9 Mnj *birḫi* ‘casser en tirant, rompre’.

Derived verbs: C 7 Mofu *-mbār-č-* ‘rompre, casser (une corde)’; E 1 Kera *bàr-gé* ‘ausreissen’.

b. (Intensive stem) **\*ḅVr-** ‘to tear (with force)’: W 3 Kupto *bàkréy* (pluract. in *-k-*) ‘to tear’; 9 Mbara *bíràw* ‘déchirer’.

Derived verbs: E 1 Kera (complete action) *bār-tí* ‘arracher avec force’; 5 WDng *bârčè* ‘ébranler, arracher avec la main’.

**255. \*b[u]rm-** ‘to step on, cave in’: W 1 Hs *búrmà* ‘to stab deeply with (foot into a hidden hole); partially cave in (ground, mud roof)’; 4 Miya *bàrmay* ‘to cave in’ [Sch].

Cf. E 1 Kera *bàlām* coll. ‘trace, Spur’.

a. **\*burum-** ‘clay’: W 4 Paa *bùrúmà* ‘clay’ [MS]; C 7 Muy *brùm* ‘potter's kiln’.

//Sem Akk *barāmu* A (OB) ‘to seal (a tablet, an opening), to engrave’, *birmu* (MB) ‘seal impression’ [CAD b:101, 258], *barāmu* B (OB) [CAD b:103] ‘to be speckled, multicolored’.

**256. \*(m)bVr- ‘to recover’:** W 2 Ngas *baar* ‘to get well, recover’ [Fl], Mghv *bàr* ‘to recover’ [JgS], ‘to survive, heal’ [BlM], Mpn *bár*, Chip *bar* [JgC] ‘to recover’; C 3 Bana *mb(ə)lí* ‘commencer à pousser, se remettre, être guéri’; 6 Daba *mbāl* ‘reverdir; ressusciter’, Gavar *mbəl* ‘get well, recover’ [Vj]; 7 Gis *mbul* ‘genesen, recover’, *mbol* ‘heilen, genesen’, Mada *ámبال* ‘guérir’, Mafa *mbál-* ‘sauver, guérir’ Ould - *mbəl* ‘guérir’, Mofu *-mbəl-* ‘guérir, reprendre (une plant repiquée), ressusciter’, Chuv *mémبالèy* ‘sauver’, Muy *ámبال* ‘to sprout again, survive’, Mbuko *mbar* ‘être guéri, donner naissance’, Zulgo *mbál (dár)* ‘guérir’; 8 Makari *biro* ‘be mature’; E 1 Kera *bùri* ‘ranimer, ressusciter’.

Cf. CCh *\*mbir* ‘to get well’ [GrR].

//Sem Akk *bāru* ‘to stay firm, stable, in good health’ Oakk on [CAD b: 125], Hbr *br<sup>?</sup>* ‘zehr fat sein’ [KB: 147], Aram talm *bārī* ‘sain, fort, gras’ [DRS: 80], Sab *bry* ‘keep os healthy’ [SD: 32], Arab *br<sup>?</sup>* (a) ‘guérir’ [BK I: 104].

[AA 2 №116 *\*bwr*, *\*bry<sup>?</sup>* ‘to become fattened, healthy; fat’: Sem, WCh 2, Gisiga, for Ch ‘oil’ see *\*(m)bur-* ‘oil, butter’].

**257. \*(m)bVr- ‘to become tired, weak’:** C 5 Pod *mbára* ‘s’aggraver’; 9 Log *mbári* ‘ermüden; tired’ [LkL]; 9a Gdr *ivrè* (velarization in contact) ‘to weaken’ [FrG]; E Bid *bèerí*, *bèrèy* ‘faiblesse, paresse’.

//Sem Arab *bry* ‘exténuer, amaigrir une bête de somme, une monture (se dit des voyages et des fatigues)’ [BK I: 119]. Cf. Berb Nig *barori* ‘misère’ [NZ: 94].

Accord. to [Gr: 90] and [TN №322], Log and Bid are cognate with Arab *magr bār* ‘ne pas trouver d’acheteur (marchandise); être très fatigué’ [DRS: 53] < Arab *bwr* ‘périr, se perdre; avoir été fait en pure perte’. Note also Arab *bawr-*, *bawār-* ‘manque de débit, stagnation de la commerce’ [BK I: 177] and W 3 Ngm *mbura* ‘to become poor’ [NEH], Bol *mburè* ‘poverty, lack’ [GAB].

**258. \*bVHVr-/\*bVwVr > bVbVr-** (compensatory redupl.) > **bVvVr- > vVvVr-** ‘to burn’: W 3 Kupto *bùurèy* ‘to separate the grains of corn from the chaff by roasting in the fire; to roast millet’; 4 Wrj *vivirau* ‘burning the hair off an animal before cooking’ [BIS]; C 1 Tera *vara* ‘to burn’ [Kr]; 6 Mbedam *var* ‘brûler’ [NdP], Buwal *vár* ‘to burn lightly’; 7 Mafa *báwár* ‘chauffer, brûler’, cf. Ould *bàr* idf. ‘prendre

feu'; E 5a WDng *bòòrè* 'activer le feu'.

Cf. W 3 Pero *piirò*; C 2 Mrg *mbàrì* [HfM: 19] 'to make a fire'.

Derived noun: W 5 Zaar *mburún* 'hearth' [CrZ]; 7 DB *mburú*, Karfa *mbùrùš* 'fire-place, hearth' [RC]. Cf. Berb MC *abraw* 'trou du feu, foyer' [NZ: 121].

Cf. : ECh *k-/t-bVr-* 'ash': 1 Kera *kóráy* (< *k-bVr-*, with a pref. of coll. nouns) [JgIb]; 2 Kaba *tàri*, Lele *tibrè* [JgIb]; 3 Tum *dàbàr*, Smr *dābrīny*, Ndam *dābrīny*, all < *t-bVr-(n-)*. According to [JgIb], these forms should be compared with Nubian *obur(ti)*, Murie, Shilluk *bur*, Songai Djerma *boron*. "All this may indicate that we are dealing with an old areal lexical item" [JgIb: 2].

//Sem Ug, Hbr *bʿr* 'to burn', Geez *baʿara* 'eat up completely, burn up, set (a field) on fire' (may be a transcription of the Hbr root, but cf. Tgr *barāʿe* 'the fire broke out') [LsG: 84]. Cush agaw Bilin *birbir* 'brennen' [RB].

**259. \*bVr- 'to turn (into)'**: W 2 Ngas *baar* 'to become dislocated; to become (a trader; big)' [JgN], 'to become mad' [Fl], Mush *mbakar* 'to turn' (internal *-k-* pl.) [JgO]; Mpn *brán* 'to turn into, become'; C 9 Mlw *bìrìyí* 'se transformer'. Cf. [TN №184].

Deriv. in *-d-* C 5 Pod *bārāda* 'tordre', 7 Mafa *bārd-* 'tordre (un couvrir, membre)', Ould *-mbàrád* 'tordre, extraire en tournant', Cf W 3 Bol *bargilu* 'sprain, dislocate, slip out of place',

**260. \*Hbr > \*bar- 'to divide, separate, crack'**: W 1 Hs *báarà* 'to split a kola-nut into cotyledons'; 3 Gera *bàarè-mí* 'to break (stick, etc. in pieces)' [SchB], Pero *bwárò* 'to share, separate', Dera *bìbiré* (compensatory prefixation) 'to crack (hands due to cold)' [NmK]; 6 Ngz *bàrú* 'to separate a unitary thing into parts', WBade *bàru* 'to split in two, separate in halves, crack', *bàrbàru* 'to break adhering things off'; C 6 Buwal *bar* 'to crack'; 7 Mofu *-bār-* 'se fendre (mur, bois)'; 9 Mulwi *bírwi* 'séparer, diviser, partager', Mnj *bírwi* 'diviser'; 10 Gizey, Lew *báráw*, Masa, Ham *búrów*, Musey *bórów* 'diviser, partager' [LexC].

Derived noun 'a part, share': W 1 Hs *báryà* 'portion of a compound, house; section of a fence'; C 9 Mnj *bəraw* 'partage'.

Cf. W 3 Kupto *bórbór* 'path, line, street; crack, split, gap'.

Deriv. in *-ç-*: C 5a Lmn *bərca* 'divide or cut into two'; E 1 Kera *bársé*

‘diviser’.

Deriv. in *-k-*: W 2 Ngas *búrk* ‘to break up (soil)’ [JgN].

//Sem Arab *hbr* ‘partager, couper viande en gros morceaux’ [BK II: 1379].

**261. W\*bVr-/C \*mbVr- ‘to crack, break’:** W 3 Tng *bire* ‘to crack (house, soil)’, Bure *ber-* ‘to break’, Pero *bírù* ‘to beat’; C 7 Mol *mbərway* ‘to destroy violently’ [FsM]; 7a Skn *mbara* ‘to break (as of a stick)’; 10 Azum *mbru-ka* ‘to break pieces off’.

Derived noun: W 1 Hs *bà-mbàraa* ‘coarsely ground millet flour’.

//Cf. ECush Som *bururay* ‘break up’ [LIS: 55].

Deriv. in *-s-* ‘to crumble, grind’: C 7 Muy *ábrùsāy* ‘to crumble’; E 5aWDng *bòrsè* ‘écraser à demi’, EDng *bòrsē* ‘concasser, écraser’, Mig *bòzò* ‘écraser à moitié’.

Cf. C 5 Pod *mbárəḷa* ‘to crack; fendre les grains’.

Judging by derivatives, Chadic *\*(m)bVr-* ‘to crack, break’ could also mean ‘to grind coarsely’ or similar. If so, the following Berber forms may be cognate: Berb Qab *bri* ‘moudre, broyer, concasser’, MC *brey* ‘moudre’, Rif *brey* ‘concasser (grains)’, Shilh *bri* ‘moudre, broyer’ [NZ: 123].

It is not clear, if the next root may also be cognate (as a derived noun of the verb *\*bVr-* ‘to break > to grind coarsely’).

**262. \*bur- ‘flour’:** W 1 Hs *búri, bíri, búrbúr-kò* ‘the flour in which balls of fura are rolled’; E 2 Kaba *kù-bàrà, Lele kú-brà*; 3 Smr *būrā* ‘flour’ [Jglb], *bróe* ‘Mehl’ [Luk], Tum *bar* ‘flour’ (irregular initial). //Cush Som *bur* ‘flour, powder’ [LIS], Sem Arab *burbūr (brbr)* ‘blé broyé’ [DRS: 81].

Denom. verb.: E 6 Mok *ʔəbbirá* ‘piler’.

Some more forms may be taken for derivatives in *-ḷ-* from the denom.: *\*ʔVbVr- > ḶVr- > ḶVr-ḷ-* ‘to grind (coarsely)’: W 1 Hs *bárzà* ‘to grind coarsely’; 7 Mofu *-bárḷáw-, bábərḷ-* (compensatory redupl.) ‘concasser (mil), moudre (grossièrement pour la première fois)’.

Cf. C7 7 Mol *borcay* v. ‘first pounding’ [FsM].

[HSED №224, TN №193].

**263. \*bur- ‘sand, dust’:** W 2 Ngas *bur* ‘sand, dust’, *bur wus* ‘the ashes’ (*wus* ‘fire’) [Fl]; 3 Kupto *bùrbúr* ‘sand, soil, ground, dust, dirt’;

C 6 Mina *bàr-tik* ‘dust’ [FrJ], Mbedam *bàr-tik* ‘ash’ [NdM]; 8 Log *búra, búura* ‘Sand, Staub’ [LkL], *bura* ‘dust’ [AIL]; C 10 Marba *bùbùr* ‘terre sablonneuse’, cf. Musey *barra* ‘la poussière de mil pilé’ [ShyM], Azum *bra-dá* ‘grain-dust’.

Cf. C 9a Gdr *burduku* ‘earth’ [Mo: 19], Mlg *barúdu* ‘Pulver’.

The following compound (with an unidentified component) may relate:

E 5a Mig *bùrú-n-tùllé*, EDng *bùrí-n-tál* coll. ‘la poussière’

//Sem Arab *bary-* ‘terre, surtout ce qui est à la surface du sol, comme sable, poussière’ [BK I: 120], Cush Som *boor* ‘dust’, *bur’o* ‘sandy hill’ [LIS], Saho *buure* ‘soil’ [Vr].

Note W 7 DB, Bok, Monguna *búra*, Karfa *áburúk* ‘dust’ [JgR, RC]; C 10 Dari *ḡārīm* ‘dust’. There is no explanation of the initial up to now, but cf. SCush Dahalo *búrune* ‘dust’ [TD].

Redupl. forms is numerous Ch languages (Ngz, Bade *bàrbàr*, Mlg *bàràbàre*, Gude *bàràbàrà* ‘dust’, etc.) are Kanuri loans.

**264. \*b[a]r-** ‘kind of corn (millet)’: W 3 Kupto *bárná* ‘guinea corn sp.’; C 2 Bura *bari* ‘pink guinea corn variety’ [BIB]; 5a Hdi *burbur* ‘corn’; 8 Zina *bàbàrà*, Log *babra* ‘maize, corn’ [AIL], Log *báa-beraa* ‘ägyptischer Mais, millet’ [LkL]; 10 Azum *boborá* ‘unripe grain’; E 5 WDng *bùùr* ‘grain jeté à la volée’. Cf. W 3 Krkr *bìryaa* ‘unripe millet heads for roasting’.

**a. \*bar[k]- ‘sorgho’:** C 10 Musey *borokka* ‘k of sorgho’ [ShyM], Gizey *bòrgéy* ‘mil – sorgo précoce’ (early) [LexC]; E 1 Kera *bòrgóy* ‘mil (sorgho)’; 7 Kaj *bargi* ‘sorgho’.

Cf. W 6 Ngz *bàrákau* ‘fesival after crops are planted’, E 6 Mok *bùùré* ‘fiest of ripe corn’.

//Sem Akk *baru* (a cereal) lex\* [CAD b: 115], Akk *burru* (a cereal) Mari [CAD b: 330], Arab *burr-* ‘grain, wheat’ [BK I: 103], Sab *br* ‘wheat’ [Bl: 59], Soq *bor* ‘froment’, Mhr *barr*, Jib *barr* [LsS: 98], PWSem *\*burr-* ‘wheat’ [Kg:203]. SCush Bur *bariya* ‘grain of corn’ [Kies], Berb Ahag *a-bōra* ‘sorgho á gros grains’ [NZ: 93].

[AA 2 №118: Sem, berb, Logone, MtF: *\*ba/u(ʔV)r-* ‘cereal’ (including Ch forms for ‘yams’ and ‘ground nut’), cf. HSED №224].

The following isogloss may be cognate:

W 6 Ngz *barbari* ‘gruel’; C 4 Bch *bùrey*, Mwl *búró* ‘gruel’ [Kr].

//Eg *bʔy* [if bry] ‘Etwas essbares aur Getreide/food made of grain’ [EG I: 417].

**265. \*(ba)bar-/\*mbur- ‘gazelle, antelope’:** W 1 Hs *bàreewaa* ‘red-fronted or Dorcas gazelle’; 3 Kupto *bíri*, pl. *bèndén* ‘antelope sp. (big)’; 4 Paa *babar*, Siri *babari* ‘gazella-dama’, Tsagu *burā-mən* ‘gazelle’ [SkNB], Paa *bàbár* ‘roan antelope’ [MS]; 5 Zul *bar-námi* ‘roan antelope’ (Buli *nam* ‘duiker’) [Cs №238], Guus *bur-to* ‘ground hornbill’ [CrG]; C 10 Gizey, Masa *bòr*, Ham, Musey *bòò*, Lew *bòbór*, Marba *bùbór* ‘céphalophe de Grimm (duiker)’ [LexC], Masa *boʔora* ‘duiker’ [JgIb], Azum *bòbórá* ‘duiker’; E 1 Kwn *mā-bārā* ‘duiker’ [JgIb]; 2 Lele *mbúr* ‘cobe onctueux (Cobe Defassa)’; 3 Ndam *bùri* ‘cobe onctueux’.

a. C 9 Mnj *bariyam* ‘cob de Buffon’, Mbara *bàriyàm* ‘redunca; Bohor reedbuck’ (note *yam* ‘water’); 10 Azum *bariama* ‘male sp. of antelope’, *bariamba* ‘female sp.’.

//Berb Ahag *é-berəy* ‘faon d’antelope addax’, Ayr *ébārəy* ‘faon d’oryx, addax’ [NZ: 125], Om Kafa *borewoo* ‘die Gazelle’ [RK], SCush rift Bur *baʔuru* ‘oryx antelope’ [Ehr: 135].

[AA 2 №108 B, Ch Hausa, Paa, Siri; HSED №217].

**266. \*bir- (< \*biHr-) ‘herd’ (n.):** W 3 Krkr *biiri* ‘a herd, flock’ [GK], Ngm *biri* ‘herd’ [NEH]; 6 Ngz *bári* ‘herd of animals’; C 2 Bura *bri* ‘herd of cattle’, *bribri* ‘very large herd of animals or flock of birds’ [BIB]; 3 FK *bàrri* ‘herd of cows’; 6 Buwal *bré* ‘herd’; 7a Skn *biri* ‘herd of domestic animals’.

a. **\*bir-k- ‘bull’:** W 3 Dera *birik* ‘bull’ [NmK]; C 7 Mafa *virek-* ‘taurillon’; 8 Bud *bergá* ‘Büffel’ [LkBd], cf. Makari *mbirga* ‘herd of cattle, sheep’ [AIM]; E 4 Ubi *bòrgù* (vowel assim.); 5 Bid *birka* ‘vache’ [HuJ], *birkì* ‘taureau, vache, troupeau’, WDng *bèrkì* ‘bovin male, boeuf, taureau’, EDng *bérkí* ‘le bœuf, le taureau’, *bèrkā* ‘la vache’, *bārkày* coll. ‘les boeufs, les bêtes (en général)’.

a. E 4 Mawa *bur* ‘vache, boeuf’; 6 Mok *búru* m., *bûr-só* (with a sing. suff.) f. ‘boeuf’.

Deriv. **‘to become rich’:** W 3 Krkr *biri-d* ‘wealth, riches’. Cf. W 2 Goem *bû:r* ‘become rich or wealthy in smth’ [Hlw]; C 6 Daba *mbùrū* ‘la richesse’. For the semantics cf. [ApAg: 41f ‘cattle’].

//Sem Akk *bīru* ‘bull, yound cattle’ MB, SB [CAD b: 266], Sabaic *bʿr* n. s. & coll. ‘cattle, head of cattle’ [SD: 26], Hebrew *bəʿīr* ‘cattle, livestock’, Aram (Jud) *bəʿīr(ā)* ‘grazing animal, cattle’, Syriac *bəʿīrā*, Neo-Syrian *bʿīrā* ‘cattle’, Geez *bəʿər* ‘ox, bull, horned cattle’, Tgr, Tna

*bāʿray* ‘ox, bull’, Arabic *baʿīr-* ‘camel’ [SED: №53 \**bVʿVr-* ‘household animal; beast of burden’, Sem \**bVʿVr-* ‘bull’ [Kg: 205], Cush Som *bar-ta* ‘livestock’ [LIS], Berb MC *taburrit* ‘troupeau’ [NZ: 125].

Not only in Chadic but also in Semitic (likely – in AA) the primary semantics was ‘cattle, herd’, with a shift to ‘bull’ in Akkadian and Ethio-Sem (contrary – in SED and Kg). For Cush agaw \**bir-a* ‘ox, bull’, Afar *beʿra* ‘young bull’, Saho *beʿéra*, Kamb *boora* ‘ox’, etc., as possible Ethiosem loans see [ApAg: 109]. [HSED №185].

**267. \**bir-* ‘enclosure, small structure’:** W 3 Bol *biri* ‘corral for cattle’ [GAB]; 5 Buli *àber* ‘hut’ [Cs]; 6 WBade *bàràabàran* ‘granary’, Duw *bàra* ‘granary, in a shape of a bottle’; C 8 Bud *beri* ‘Einfriedung, enclosure’ [LkBd]. Cf. C 7 Mol *bàra* ‘granary’ (irreg. initial).

**b. \**bir-n-* (pl.) ‘village’:** W 1 Hs *bírnii* ‘(walled) town, the wall of a town, a mound round a farm’; C 3 Bana *bèrni* ‘ville’, pl. *bèrni-xì*; 4 cf. 4 Gude *vàrənə* ‘village, neighbourhood’; 5 Pod *bàrəna* ‘ville’; 7 Ould *bàrà* ‘village’.

Cf. Kanuri *bàrnyì* ‘large town surrounded by wall’, Songai *birni* ‘fortified village’ [SkH]. A loan from Hausa?

//Sem Akk *birtu* ‘citadel, castle’ from OB on [CAD B: 261], Hbr *bīrā* ‘castle’, Aram *byrh* ‘fortress, temple, sanctuary’ < Akk [KB: 122, JH: 155, DRS: 63]. Cf. Cush Arb *baara* ‘hut’ [Hay]. [HSED №359].

**268. \**bVr-(w)-* ‘(cotton) cloth’:** W 1 Hs *búra* ‘white cloth’; C 10 Dari *mbàràw*, Dzpw *mbàráó* ‘cotton, cloth(es)’, Musey *baraw-na* ‘vêtement’, *baraw-ra* ‘cotton, chemise’ [ShyM], Masa *bàraw* ‘coton’, Musey *bàràw*, Ham, Lew, Marba *bàrú* ‘cotton, bande étoffe’, Mus *bàràw*, Lew *bàrúw*, Marba *bàrú* ‘habit’ [LexC]; E 2 Lele *bàrù* ‘cotton’. //Sem Akk *barru* (or *parru*) OAKk (a piece of apparel) [CAD b: 113], Cush Saho *boor*, *buur*, Afar *boru* ‘das Leibtuch’ [RA], Om Kafa *buuroo* ‘das Leibtuch, womit die Körper eingehüllt wird’ [RK].

**269. \**bVr-* ‘ram’:** W 4 Tsagu *baaren* ‘ram’ [SkNB]; 5 Buli *bára* ‘ram’ [Cs №230]; C 5 Wnd *avire*, Pod *vúira* ‘agneau’ [Mo: 21].

**a. \**m-bVr-* ‘sheep’:** W 5 Buli *mberra*, Geji *mbella*<sup>35</sup>, Jimi *mburra* [JgIb], *mbùra*, Grnt *mbòrò* [Cs].

<sup>35</sup> Cannot follow AA \*(*wa*)*bil-* ‘small cattle’ as in [SED №245].

b. Deriv. \**m-bVr-(K)*- ‘ram’: W 4 Mburku *mbur-gu* [SkNB], Miya *mbàr-gu* ‘ram’ [Sch].

Cf. C 10 Musey, Lew, Marba *mbràŋ* ‘bélier castré’ [LexC], Musey *mbarañña* ‘le mouton castré’ [ShyM], Azum *mbrangâ* ‘castrated sheep, mature’.

//ECush Som *baraar-ka* coll. ‘lamb, lambs’ [LIS].  
[HSED №341].

**270. \**bVr-*** (or \**HVbVr*, note compensatory reduplication in CCh) ‘field’: C 4 Gude *bà-bárá* ‘open field, farm’; 7 Muy *bù-bùr* ‘tilled field’; E 1 Kwn *kō-bārā* ‘field’; 4 Sok *bàr-sù* ‘field’ [JgIb]; 5a WDng *bûr-dâ, búr-dúwā* ‘champ d’arachides ou de pois de terre’, Mig *bâr-če* ‘jachère’.

//Sem Akk *aburru* ‘field or pasture by the city wall’ from OB [CAD a: 90]; ECush Som *beer* ‘farm, garden’, *beero* ‘farms, plantations’ [LIS]. Boni *beer* ‘garden’ [Sam]; SCush rift Alg *burabura* (redupl.) ‘cultivated ground’ [Eh].

Denom. verb: \*(?*a*)*bVr-* ‘to cultivate, to hoe’: C 7 Mada *óbbòr* ‘biner devant de semer’.

a. Deriv. in *-s-*: W 6 Duw *bàrùs-čùwo* ‘to hoe up’; C 9 Mbara *búrsi* ‘to hoe’; E 5a Mig *bòrzò* (voicing in contact) ‘remuer la terre pour préparer les semences des sésames’.

b. Derived verbs: C 7 Mafa *búr-h<sup>w</sup>*- ‘labourer à la houe’, *vúr-h<sup>w</sup>*- ‘labourer, retourner la terre’. (note that *bur-* & *vur-* becoming free variants in CCh); E 5a Bid *bere-t* ‘sarcler, biner; to weed, hoe’ (totality ext.), W 4 Jmb *bàr-dâ* ‘to cultivate’ [SkNB].

//Old Cush (Cush-Om) \**abu<sup>2</sup>r-* ‘to cultivate’: Om Yemsa *bul-* ‘cultivate’, ECush Alaba *abuurr* ‘to cultivate’, Had *abuull-* ‘to cultivate, plough’, Sid *habuur, hawuur* ‘cultivate, plant’ (with ‘parasitic *h-*, compensating lenition of *-b-*) Som *abuurr*, Afar *-ub<sup>2</sup>ur* ‘to cultivate’ [LmW: 313], Cush agaw Hamir *baruw* ‘auflockern die Erde mit einem Karst’ [RCh]. Som *beeray* ‘to farm, sow, cultivate, plant’ [LIS]. Sem Geez *ba‘ara* ‘dig, plough, break clods’, *mab‘ar* ‘one who ploughs, plough, instrument for digging’, *mab‘ār* ‘instrument for digging’ > Cush Afar *-ub<sup>2</sup>ur-* ‘to cultivate’ [LsG: 84],

Cf. MtF №17 (Mada, Mig forms are included). For Eg *bʾ* ‘hacken’ as a possible cognate of Hamir and numerous alternative etymologies see [EDE II: 26-29].

Derived nouns:

c. **\*bVr-/\*bVwVr- furrow**: W 3 Krkr *booro* ‘ridgegrow’ [GK], Bol *booro* ‘furrow’ [GAB]; 5 Zaar *m-bári* ‘perpendicular ridge limiting a field at both ends’ [CrZ]; C 6 Daba *bàrày* ‘le sillon’.

d. **\*bVr-m-** (with a suff. of instruments) **‘hoe’**: C 7 Merey *bàrà̀m*; 10 Masa *bòrom* [CC]; 9a Gdr *bár-daw* [GdD]. Cf. Cf. C 5 Wnd *yivere* ‘small hoe’ [Voc].

//Cush Burji *bóyr-a* ‘two-handed hoe’, Konso *payr-aa* ‘two-tipped digging stick’; Gidole *pawr-* ‘a two-bladed digging stick’, Dob *payr-e* ‘two-pronged hoe’ [SsB].

For E 5 Bid *beret* ‘sarcler, biner’ (see above) cf. **\*bVr- ‘weeding; to weed’**: C 6 Buwal *barayy* ‘second weeding’; 7 Mofu *báray* ‘2nd weeding’; 10 Azum *bara-t-na* ‘weeding of fields, garden’; E 2 Lele *bír* ‘sarcler, décherber’, *biré* ‘sarclage’.

Note C **\*bVr- ‘to weed’** (denom. < **\*bar-** ‘weeding’): 6 Daba *bèr* ‘sarcler; tracer une ligne’; C 8 Kus *birgo* ‘enlever les mauvaises herbes; sarcler’ [ALK].

//Cf. Om Wolt *bu’l-* ‘to weed’ ‘From an Old Cush stem *\*abu’r-* ‘to cultivate’ [LmW: 313].

For Geez *ba’ara* ‘to dig’<sup>36</sup> cf.:

WCh **\*bur-** < **\*bHur-** < **\*buHur-** ‘to dig, to bury’: 3 Kupto *bùuráy* ‘to dig, hollow out’; 7 *\*bur-* ‘to bury, to dig: Bok *bor* ‘graben, Feld bestellen, to dig’, Fyer *bur* ‘begraben, eingraben, to bury, dig in’, DB *buur*, Sha *bur* ‘begraben’ [JgR], Bok *bor*, Mangar *bo* ‘to dig’ [RC].

Derived nouns: 1. W 7 Sha *’abúr* ‘Grab’ [JgR], Mundat *àbùrèŋ*, DB *burán*, Monguna *bûr* ‘funeral’ [RC].

2. W 3 Bol *booriyo* ‘gap or hole’ [GAB]; C 4 Gude *bùràhá* ‘cave’.

**271. \*bVr- ‘rope, tendon’**: C 3 FK *bàr-tà* ‘muscle’; 4 Gude *bàrà-dá* ‘Achilles’ tendon’, *baarə* ‘to spin web (of spider)’, cf. Gude *bàryàncána* ‘thread’; 7 Mada *mèbbèr* ‘cordelette en fibre de palmier’, Ould *bàbàr* ‘fil à décoration’; 10 Gizey, Masa *bàràw* ‘fil’ [LexC]; E 1 Kwn *bāru* ‘thread’; 5a Mab *burε*, Bid *ber-no* ‘rope’ [HuJ], WDng *bûrò* ‘tendon d’Achille’, cf. EDng *bèrì-ngō* ‘le tendon du biceps (qui enfle quand on le frappe)’, Bid *bùrà-sá* ‘muscle’; 5b Jegu *búrré* ‘rope’.  
[HSED №193].

<sup>36</sup> Cf. AA *\*b’r* ‘to dig’ (Geez, ron *\*bur* ‘(be)graben’) [TN №129].

**272. \*bVr- ‘bad spirit’:** W 3 Tng *bura* ‘name of bad spirit’; E 4 Ubi *beere* ‘mauvais’; 6 Mok *bîrré* ‘se promener (pour les mauvais esprits) la nuit pour manger les âmes des gens’.

Cf. W 2 Mghw *Kíbírí* personal n. ‘Mwaghavul spirit; spirit causing a sickness affecting teeth, tongue, gums’ [BIM].

Derivd nouns : W 7 Sha, Bok *<sup>m</sup>burú*, DB *<sup>m</sup>búru* ‘Medizinmann’ [JgR]; C 9 Mbara *<sup>m</sup>bré* ‘sorcerer’.

//Sem Akk *bārūtu* (from OB on) ‘act of divination’, *bārū* (from OB on) ‘a diviner’, *barīrītu* (MB, SB) (a female demon) [CAD b: 131, 121, 111]. Cf. Geez *bāryā* ‘slave, one who is in the service of a demon, epilepsy’, Tna, Amh, Gur *barya* ‘slave’ (orig. the name of a population). Accord. to the popular belief, the *barya* is a spirit that brings an epilepsy’ [LsG: 108].

**273. \*bVr- ‘side, bank’:** W 3 Bure *búrà* ‘bank, edge of river’ [GAB], Krkr *bàrà-kuu* (pl.) ‘ribs, side’ [GK]; C 3 Bana *b(à)là* ‘côté’; 6 Mina *bár* ‘side’ [FrJ], Mbedam *bàra* ‘côté, flank’ [NdM]; 8 Makari *bala* ‘side of smth’ [AIM].

Cf. W 5 Zaar *bilâ:r* ‘river-bank’ [CrZ].

Deriv. (with a body-part’ suff.) *\*bal-m-* < *\*bar-m-* ‘cheek’: 7 Gis *balam* ‘Schläfe, Wange’ [LkG], Mofu *bàlám*, Gis *balam* ‘cheek’ [JgIb].

//SCush rift *\*bara* ‘side, direction’: Irq, Gor, Alg, Bur *bara* [Kies], ECush Som *barbar* ‘side, edge’ [LIS], Sem Arab *barr-* ‘rivage’ (also ‘terre, pays’, etc., see above) [BK I: 103].

**274. \*bVr- ‘pigeon, dove’:** W 1 Hs *bàruu* ‘pigeons’; 3 Krf *mbìrù* ‘dove’; 4 Wrj *baru-na* ‘pigeon’ [BIS]; 6 Ngz *bàrí* ‘domestic pigeon’; C 10 Gizey *bèrbér*, Masa, Ham *bérbér*, Musey *bèbée*, Lew *àbèrbér*, Marba *àbèrbèr* ‘Treron walia’ (pigeon) [LexC]. Cf. W 3 Glm *mbûr-gu* ‘dove’ [SchB]; C 10 Azum *ber-ge-ida* ‘sp. of dove’.

//Eth Sem Tna *bareto*, *baräto* ‘turtledove’, Amh *baret* ‘pigeon, dove’ (apud [SED II №61]).

Note two more fragmentary isoglosses for: ‘kind of small bird’:

a. *\*baHar-* ‘quail, partridge’: W 1 Hs *bárwáa* ‘the common quail’; E 5 Mig *bàaré*, WDng *báàrè* ‘perdrix’.

b. *\*bi/ur-* ‘quail’: Hs *bùràaburàa* ‘quail’; E 5 Bid *bìrbìrnyí* ‘caille’ //ECush Burju *bur-o* ‘partridge’ [SsB], Berb Sen, Rif *abarran* ‘perdrix’

mâle' [NZ: 114]. [HSED №293].

**275. \*(bV)-bVr-** 'wind, storm': 3 Krf *bùrá* 'harmattan' [St]; C 9 Mbara *bàràwáy* 'tornado', Msg *bebeer* 'Wind', *berbéer* 'Sturm, Wind' [LkM]; 10 Gizey *bàr* 'vent', Gizey, Ham, Masa *bìrí* 'orage, tornado', Lew, Marba *bàbàr* 'tornado' [LexC], Azum *babarâ* 'storm with wind', cf. Musey *mbir-vinda* 'tourbillon' (*vinda* 'vomir') [ShyM]; E 1 Kwn *ká-bār* 'wind' [Jg]; 7 Kaj *bùrúurù* 'tourbillon'. Cf. C 7 Mofu *bār-zawal* 'tornado sèche' and Balda *vúvúurú*? (< *buvuru* < *buburu*) 'wind' [Bry]. Note C **\*δVr-** 'dry wind': 6 Daba *bùr-tótóy* (cf. *tóy tóy* 'dur, fort') 'vent fort avant la saison de pluie'; 9 Mnj *baray* 'orage, tornado sèche'. Secondary emphatization.

**a. \*(?a-/m-)bVr-** 'to blow (wind)' (denom. verb?): C 2 Chb *mbàr* 'blasen' [HfC]; 10 Musey *bura* 'souffler' [LexC]; E 1 Mobu *boore*, Ngam *bré* 'souffler'; 5 Bid *àbar*, EDng *àbire* 'souffler (vent)'. //Sem Arab *bāriḥ-* 'hot wind' [BK I: 107]. HECush *\*bobore* 'wind': Kamb *bobora* [Hds]. Cf. [Iglb *b-r*, TN №216].

**276. \*bVVr-/\*δVr-** (< *\*bVHVr-*) 'fighting, rebellion': W 1 Hs *bòoree* 'perversity, disobedience, rebelling against authority'; 2 Mghv *bèer* [BLM], Mush *bèer* 'war, fight' [JgO]; 3 Pero *búré* 'fighting'; 6 Bade *bòorai* 'rebellion' (< Hs); 7 DB, Monguna *búr*, Bok *bur*, Sha *bur*, Mundat, Kulere *búr*, Karfa *búr* 'war' [RC]; C 10 Peve *bar* 'rebel' [Vn]. Cf. C **\*vVr-** (< *\*HVbVr-*?) 'fight': 7a Skn *vur* 'fight, war'; 7 Mofu *vəram* 'guerre, combat', Mbuko *véram* 'guerre'.

Denom. verb: E 6 Mok *òbbirà* 'combattre (pendant une guerre)', *òbbirè-k-árkà* 'faire la guerre'.

//Sem Akk *bāru* (from OB on) 'stir up a revolt' (CAD b: 130). Note also SCush Dah *ᵐbóori* 'fight, war' [TD]. For an alternative etymology of Ch see [TN №198].

**277. WCh \*-bVr-** 'horse': ngas gr. Mush *bìrìḡ*, Ngas *bàráḡ*, Mghv *bàrìḡ* (note also *mbàra-m* 'horse harness'), Mpn *bràḡ* 'horse'; ron gr. Bok *ᵐbírí*, Fyer *búrí* 'horse'; E 3 Smr *bráaberaa* 'Nilpferd' [Luk].

**b. CCh \*m-/ʔ-bVr-** 'strength': 3 Bana *bàr-čí* 'force'; 5 Hdi *mbàra-ku*, Lamang *mbàrú-kú*, 6 Buwal *barəbar*.

//Sem Ug *ibr* of a stocky male animal 'bull, horse', Hbr *ʔabbīr* 'bull, stallion', *ʔabbīr* 'strong powerful' [DUL: 11f, Kg: 8f]. Kogan

suggested that this animal name may represent a substantivized adjective *\*ʔab(b)īr* ‘strong, mighty’, while the latter is derived from the verbal root *\*ʔbr* ‘to be strong, vigorous’.

**278. ECh *\*bur-* ‘boat’:** 2 Kaba *ko-brə* [Cp], Gbr *ko-boro* ‘Boot’ [Luk], Lele *kò-brō* ‘pirogue’; 3 Smr *bruua* ‘Boot’ [Luk], Ndam *buro* ‘boat’.

//Eg *br* (*bjr*) (N) ‘Art Seeschiff (zu Reisen, zum Transport von Lasten)’ [EG I: 465]. The following Sem data (isolated and *hapax*) seem to be a Eg loan: Ug *br* ‘sorte de navire’, Hbr *\*bar* (*b<sup>a</sup>rēhem*) ‘cargo’ [DRS: 63]; Ug *br* ‘type of barge’ [DUL: 233]. One more Eg word may be cognate with ECh *\*bur-*, namely: Eg *bʔw* [if = brw] (Lit.MR) ‘Art Schiff zu Lustfahrten und Reisen’ [EG I: 418]. Cf. [HSED №336].

**279. *\*bVr-m-* > *H-/k-bVr-m-* ‘knee’:** W ‘knee’; 2 Mpn *furùm*, Mghv *kə-fūrùm*, *fūrùm* [JgS], Ngas *ferem* [Hff], Mnt *fīm*, *pə-fiim*, Grk *furùm* [JgC], Mush *bórùmò* [JgO], Goem *fárám* [Hlw]; 3 Gera *bùrmì*, Glm *bù-bûr*; Grm *burmù* [SchB], Bol *burum* [JgIb], *bo-burum* [Meek], Krkr *bèeràsìn* [GK], *beera-sim* ‘knee’ (‘knee’ + ‘leg’) [Meek], Ngm *bùurù*, Dera *bárəm* [SchV], *bò-bàrəm* [JgIb], Tng *purum*, Pero *púrùm*, Kupto *fúrùm*, Maka *burum* ‘knee’ [NmM], Bure *bórùmò* ‘knee, elbow’; 4 *\*y-burum-*: Warji *ɣwùrmù-ná*, Kariya (*ɣ*)*wurum*, Miya *wúrùm*, Paa *bùrmì*, Tsagu *bóm-bárən* (*-n#* < *\*-m#*), Siri *ɣàrma*, Mburku *wīrin*, Jmb *vurmú* (compensatory prefixation) [SkNB]; 5 Tala *kàa fūrùn*, Geji *gú hulan*, Kir *kaa furum* [Smz], Guus *vùrún* [CrG], Grnt *vàran*, Jimi *húrum*, Tala *kaa-furin*, Bogh *fiim*, Mng *kam-hurum*, Saya *gaŋ-varən* [Cs]; C 6 Buwal *b<sup>ə</sup>ra* ‘hip’ (cf. Sem Akk).

Denom. verb in *ʔa-*: *ʔabVr-* > *ɔVr-* ‘to kneel’: C 10 Dzpw *burú*, Diri *būrū* ‘marcher sur les genoux’; E 6 Mok *ʔəbbirá* ‘s’agenouiller au bord d’un ruisseau pour boire’ (cf. Sem Soq *berk* ‘genou’ > *ʔəbrek* ‘faire agenouiller’ [LsS: 96]).

//Sem *\*bi/ark-* ‘knee’: Akk *birku* (*burku*) ‘knee; lap’ from OB on [CAD b: 255], Ug *brk*, Hbr *bārāk*, Aram (Jud) *birkā*, Arab *bārik-at-*, Gees *bark*, Soq *berk*, etc. ‘knee’ [Fron *\*birk-* 2.92, SED I №39]. Cf. Om Kafa *borboroo* ‘Schienbein’ [RK], Ari *bar* ‘thigh’ [BnO: 352].

For the same reflex of Ch *\*b-* (*\*k-bVC-* > *k-fVC-* > *fVC-*) see CED №1 *\*ʔabVn-/\*ku-ʔabVn-* > *fun-* ‘grinding quern’. For *-m-* as a possess. suff. in Ch forms for body-parts see [Luk], *\*IVs-m-* ‘tongue’ [CED №568].

It cannot be excluded, that C<sub>3</sub> in AA *\*bVr-k-* was attributed as a body-part' affix (attested, e.g., in *\*baw/y-k-* 'mouth', see №5 above) and replaced on the PCh level by the possessive marker: AA *\*bVr-k-* > Ch *\*bVr-m-*.

**280. *\*(m)bar-* 'person':** W 'person': 3 Gera *bár-mì* m., *báar-nàaná* pl., Glm *mbər* pl. [SchB]; 4 Paa *mbárìn*, Mburku *bar-gi* (< *bar-ki*) (cf. *mbur-gu* 'ram'); 5 Jimi *mbur*, Zul *mbarime*, Plc *mbáam*, Tala *baa*, *mbar* [Cs], Geji *mbalín* (< *\*mbarVn*) [JgIb] cf. Mng *bəbəər* 'man, male' [Cs]; C 7 Mada *mbre* 'personne', Gis *mburo*, pl. *muḷay* 'Mensch'; E 1 Kera *bàr* 'father'; 2 Drm *bara*, Gbr *barua* 'Mann' [Luk]; 3 Ndam *bàr* 'person' [JgIb].

Cf. W 3 Ngm *bòr* 'unmarried man' [NEH]; E 5a EDng *bùuriyē* 'rester invendu, non marié'.

a. ***\*m-bVr-* 'people':** W 3 Glm *mbər* pl. of *mìi* 'person' [SchB]; C 3 FK *mbárí* 'people, person' pl. of *ndó* 'person'; E 3 Smr *burre* 'people' [Bn].

//Cf. ECush Som *barbaar* (pl.) 'young man' [LIS], Om Yemsa *bar* 'he' Personal pronoun 3 sg. m. [LmY]. [HSED № 214].

**281. *\*mb(w)ar-* 'lion':** W 2 Ngas *bwaar* [Fl], *mbwàar* [JgN], Mghv *mbóór*, Mpn *mvér* (irreg. reflex) 'lion'; 7 Fyer *'mbwaar* [JgIb]; 5 Geji *mbwol* [JgIb], Plc *bwár*, Zul *mbori* [Cs №265]; C 4 Nzn *mbárō-ga* [JgIb]; 6 Mina *mábàr* [FrJ]; 7 Chuv *màbàr*, Mofu *mòbár*, Gis *mobor* 'lion' [JgIb], Mbuko *bérbór* 'animal (lion?)', 7a Gdr *bōlu* [JgIb], E 5a WDng *bùuri*; 5b Tor *borom*, Brg *bóròm*, Kaj *bùrmà* 'lion'.

[JgIb: 112, AA 1 №140: Ch Ngas, Mghv, Dng + Berb Ghad *aḃur*, Ghat *ahər*, Ahag *a-har*, Zng *war*, Nef *waar*, HSED №246 'lion, hyena'].

**282. *\*(m)bur-* 'oil, butter':** 7 Bok, DB *mbaar* 'oil', Koll. [JgR]; C 7 Mafa *mbár* 'huile'; 8 Log *bráaree* 'frische Butter' [LkL]; 10 Dzpww *mbūr* 'graisse, huile, miel', Dari *mbúr* 'oil, fat', Peve, Ngide *mbúr*, Hedè, Zime *mbur* 'oil' [Shy], Azum *mbula* 'fat, oil, grease', Gizey, Masa *mùl*, Ham, Lew, Marba, Musey *mbùl* 'graisse, huile' [LexC]. (masa -l# < Ch *\*-r* is irregular. A root-varint?).

[JgIb *mbur*].

Denom. verb in *'a-* 'to oil': W 5 Zaar *bor* 'add (oil to a dish)' [CrZ].

//PHEC *\*buuro* 'butter': Had, Gede'o *buuro*, Kamb *buuru*, Sid *buuró*,

\**buur-* ‘anoint, smear’, cf. \**buur-d-* ‘annoit os’ [Hds], dull Goll *piir-* ‘buttern’ [AMS]. Cf. Eg *ybʔ.t* [if ybr] 18 ‘Art Salbe oder Öl’ [EG I: 62].

**283. \*(m)bVr- ‘plain, place, land’:** W 3 Maka *bóró* ‘fallow, unfarmed land’ [SvP]; 4 Paa *mbùrá*, Siri *bəri* ‘place’ [SkNB]; 5 Buli *ábər* ‘place’, Jimi *baaro* [Cs №426]; C 7 Muy *mbàrnā* ‘unfertile area’, Mbuko *barbarawan* ‘la plaine’; 7a Skn *mburum* ‘land, place’; 10 Masa *bàrà*, Gizey *liy bürù* ‘terre noir’, Gizey *bààrí* ‘terre lessivée’ [LexC]; E 6 Mok *bérè* ‘plaine au pied de la montagne’.

Note C 6 Daba *vàrà* ‘la plaine’; 7 Mafa *vara* ‘terrain plat’ (< \**-bara*). //Sem Akk *bāru* (a syn for open country). L(oan) W(ord) from Sum *bar* [CAD b: 120], Akk *barr-* ‘terrain non construit’, Aram JP, Syr *barrā* ‘campagne, champ ouvert’, Sab *br* ‘terre, région, plaine’, *brr* ‘zone de pâturage’ [DRS: 87], Sab *brr* ‘open coutry, plain’ [SD: 31], Hbr *bar-* ‘freies Feld; open field’ [KB: 146], OffAram *br* ‘what is outside’ [HJ: 195], Arab *barr-* (*brr*) ‘terre ferme, continent; pays, champs, ravage; campagne (opp. à jardine), dehors’, *bariyy-at-* (*brr*) ‘champ, plaine’ [BK I: 103f], Mehri *bur* ‘country’ [JnM], Cush Bilin *bira* ‘land’ [RB], *bəra* ‘ground’ [ApAg: 59], Beja *beréer* ‘Steppe, Wüste’ (< Arab *brr-*) [RBD], Saho *baarho* ‘earth, ground, country’ [Vr], Som *birri* ‘land (as opposed to sea)’ [LIS], Arb *boore* ‘earth’ [Hay]. For cognates of Eg *bʔ.t* ‘Steppe’ see [EDE II: 32].

Note C 10 Musey *bubura* ‘large, vaste’, *buru* ‘outside’ [ShyM] and Berb MC *abaraw* ‘large, vaste’ [NZ: 121].

Cf. [HSED №337].

**284. \*bHr/\*Hbr- > \*bVbVr- ‘bed-bug’:** W 5 cf. Guus *bul*, Dott *bóli* ‘bed-bug’ (irreg. *-l-*) [CrG, CrZ]; C 6 Daba *bàràrà̄m* ‘punaise’; 7 Gis *babaram* ‘Wanze’, Mofu *bábáram* ‘punaise’; 9 Mbara *bòbór* ‘bed-bug’; 10 cf. Masa *bari-na* ‘perce-oreille, tick’; E 2 Lele *bòrbór* ‘punaise’; 4 Sok *bóboroo* ‘Wanze’ [Luk].

**285. \*burgVč- ‘louse’:** C 5 Pod *birəgešəwe* ‘pou de chien’, Glv *birəgšūwa* ‘tick’; 6 Daba *mbürgūč* ‘le pou’; E 5a Bid *bugùlčú-mò* (metath., *-lč-* < \**-rč-*) ‘larve’. Cf. C 8 Log *mburgumisi* ‘punaise’ [AIL], Afd *bligmy*, Log *bórgomī* ‘Kamellaus’, cf. Musuk *biggerui* [Sol: 229]; E 4 Saba *bər* ‘(head) louse’.

//Sem Arab *burgūt-* ‘puce, flea’ [BK I: 113], Akk *peršaʔu* (Oakk on)

‘Floh’ [AHw: 855], Hbr *par’ōš* ‘flea’ [KB: 780]. Cf. Sem \**pVrgVt* [SED II №185], \**pargut* [Fron 5.88], \**pVrgVt* [Kg: 212]. Berb Shilh *aburegs* ‘sauterelle’ [NZ: 107], Rif *buryes*, Izn *burehs* ‘grillon’, Snus *aburyes* ‘insect’, Sghr *burhs* ‘small grasshopper’ (apud [SED]).

On Semitic \**p* see [SED I: 246]. Cf. [HSED №345].

Note a possible root variant with a lateral fricative: Central Ch 7 Ould *té<sup>m</sup>bèrèkélēw* ‘criquet migrateur’ ~ Sem Arab *bargas-(at)-* ‘mouche-ron’ [BK I: 113]. Both < AA \**bVrgVc-*.

**286. \**bVr-* ‘white’:** W 5 Dott *bèri*, Wangdai *b̄ari* ‘white’ [Smz]; C 6 Daba *bàrān* ‘blanc’; 7 Gis *babar-an* ‘white, clear’, Mofu *má-bará* ‘white’; 8 Gulfei *ber-de* [Luk]; 9a Gdr *bàbàr* [FrG]; E 1 Kwn *bārē-tin* [Jglb]; 2 Kaba *burwa*, Nch *barə* [HmK], Gbr *bére*, Drm *bere* [Luk], Lele *bòr*; 3 Smr *buró-ge* ‘white’ [Luk].

Denom. in ?*a-*: ?*abVr-* > ?*abVr-* > *bVr-*: W 5 Dott *b̄ari* ‘to be, become white’ [CrD]; C 9 Mnj *birhi* ‘blanchir’, Mlw *b̄irhi* ‘devenir blanc (de poussière), blanchir’.

//Sem Geez *brr* ‘purify, make white’, Hbr *bārer* ‘purify’ [LsG: 106] Arab *bariha* ‘be white’ [LsG: 104], *brh* ‘avoir de carnation blanche’ [BK I: 118f], Ug *brr* ‘to be or remain pure, clean, free’, Aram Palm, Jud Aram *brr* ‘to make clear’ [DUL: 237]. For Ch and Eg *b̄h* ‘le blanc de l’oeil’ (if = \**brh* ‘white’) see [EDE II: 81f].

**287. \*(?a)bar-/bVwVr- ‘big, large’<sup>37</sup>:** W cf. 1 Hs *ábàarà* ‘an epithet applied to anything which is both large and heavy’; 4 Mburku *babar-ən* ‘long, tall, big’ [SkNB]; 5 Dott *bari* ‘big’ [Cr], Zaar *vàri* ‘big’ [CrZ], Buli *bàr*, dass sub-group \**bàri* ‘big’ [Smz]; C 5a Lmn *b̄ar-ḡà* ‘(to be) big’ [Wff]; 6 Mina *b̄i-mbriv* ‘large’ [FrJ]; E 4 Mawa *bwar* ‘large’, *bwar-* ‘élargir’, Ubi *boor-gà* ‘large’.

Redupl.: C 7 Zlg *b̄ar̄b̄ar* ‘être lourd à porter’, Chuv *b̄èl̄b̄èl* ‘lourd’.

Denom. verb: E 5a Bid *buràm* ‘agrandir, élargir’, EDng *b̄èrlē* ‘devenir large’ > *b̄érl* ‘large, gros, épais, volumineux, enflé’.

Cf. W 3 Dera *b̄á-mb̄aràm* ‘largeness, importance’ [NmK].

//Berb Qab *abarar* ‘énorme, très grand/en grand quantité (taille ou volume)’, MC *abaraw* ‘large; vaste; épais; gros’ [NZ 93,121], Shilh *berari* ‘être épais’ [NZ: 124], ECush Som *buur-an* ‘stout’, Rend *buur* ‘big (of things)’ [Sam].

<sup>37</sup> For Eg *b̄w* ‘Ruhm, Macht, Gewalt’ as a cognate see [EDE II: 9].

For Arab *nbr* ‘grandir’ cf. CCh \**vir-* (< *nbr* ?) ‘to increase’: 2 Bura *vira* ‘to increase’; 9 Mlw *virđi*, Mnj *virđi* ‘augmenter’.

The following root may be cognate (terms for ‘big’ & ‘swollen’ are often confused, see eg, E 5a EDng *bérél* ‘large, gros, épais enflé’ and Berber *abaraw* ‘large; vaste; épais; gros’).

a. \**bVwVr-* ‘(to be) full, to swell’: W 2 Mghv *bwer* ‘full’ [JgIb]; C 4 Gude *mbaarə* ‘to swell from pregnancy (stomach only)’; C 10 Musey *bura* ‘pourrir, enfler’ [ShyM]; E 5a EDng *búuriyé* ‘fructifier, gonfler, enfler’.

Deriv. in *m-/ʔa-* ‘filled, swollen’: W 2 Mghv *ḅwer* ‘to be full, fill to the brim’ = ‘filled’ [BIM]; C 7a Skn *mbur* ‘swollen’; 7 Mafa *ḅor-ḅororaʔa* ‘épais, gonflé’.

//ECush Som *barar*, Boni *barʔér* ‘to swell’ [SAM].

**288. \**bir-* ‘wet’:** W 2 Mghv *mbira-k* ‘wet, not fully dry’ [BIM]; E 2 Gbr *birra*, Drm *bra* ‘nass’ [Luk].

Denom. in ʔa-: ʔ*abarak* > *ḅara-k* ‘to become wet’: W 2 Goem *ḅàrà-k* ‘become wet, fresh’, Mush *ḅara-k* ‘to be wet’.

//Berb Qab *bberber* ‘être mouillé abondamment’ [NZ: 90], cf. Eg *bʔy* [if bry] ‘feucht sein’ Med [EG I: 417], for alternative cognates see [EDE II: 44-48], [TN №185].

For a root variant cf. \**fVr-* ‘(to) wet’: W 2 Ngas *fir* ‘to wash hands’ (apud [TAS: 108]), Mghw *fəriš* ‘auswaschen (durch Wasser)’ [JgS]; C 9 Msg *áfri* ‘feucht, nass; wet’ [LkM].

**289. \**bVr-* ‘heat’:** W 2 Mpn *biar* ‘heat’ [Fp]; C 2 Bura *borbor* ‘hot’ [BIB].

Derived verb: W 1 Kera *bóoré* ‘to warm o.s., to find fire’; cf. C 4 Gude *ḅəraḅə* ‘to warm smth (oneself)’.

//Cush agaw Bilin, Hamir, Aungi *bər-* ‘hot, warm’ [ApAg].

**\*F**

**290. \*fV<sup>2</sup>/w/y-** ‘to blow<sup>38</sup>, dry’: W 2 Ngas *fii* ‘to blow’ [Fl], *fii* ‘to blow, winnow, dry’ [JgN], Goem *fi* ‘to blow or fan smth (in order to dry it)’ [Hlw], Mpn *fii*, Chip *fi* ‘to blow’ [Kr], Mush *fii* ‘to be dry, blow’ [JgO], Mghv *fii*, pl. *fyaat* ‘to blow, dry’ [BlM]; 3 Bol *fo*<sup>22</sup>- ‘trocken werden’ [LkB], *pò<sup>22</sup>ù* ‘to dry up’ [GAB]; 4 Wrj, Mburku, Miya, Kariya *fay-* ‘to blow’ [SkNB]; 5 Dott *fifée* ‘to whistle’ [CrD]; 6 Duw *fiyo* ‘to start fire, blow fire’, Ngz *fiyú* ‘blow’, *fiifiyu* ‘to whistle’; C 2 Bura *fi* [BlB]; 4 Gudu *ufi* [Jglb]; 5a Gdf *fə-* ‘to blow’ [KimG]; 6 Daba *ʔuf* (metath.) ‘to blow’; 7 Mofu *-f-* ‘souffler, siffler’, Mol *fowwa* idf. ‘sound of wind blowing’ [FsM]; 8 Bud *fa, phe, fwo* [LkBd], *fá* [Awg] ‘to blow’, Log *fa* ‘to blow’ [Jglb]; 10 Dzpw *fó<sup>2</sup>ó*, Dari *fō<sup>2</sup>* ‘souffler’, Peve, Hedè *fo<sup>2</sup>*, Zime *fo<sup>2</sup>o* ‘to blow’ [Shy], Ham, Musey, Lew, Marba *fó*, Masa *fóó* ‘souffler’ [LexC] (cf. 10 Musey *fora* [fo-ra] ‘souffler’ [ShyM]): E 2 Nch *-pa* [HmK]; 3 Tum *po* ‘to blow’. Cf. C 5 Wnd *ukfeya* ‘wind’ [Voc].

//Cf. Eg *nfy* ‘ausatmen, hauchen’, *nf* MR ‘Atem; Wind’ [EG II: 250], PECush *\*ʔuf(u)f-* ‘blow’ [SsB: 183], agaw *\*əf y-* ‘blow’, Beja *fuuf-* [ApAg]. Berb Shilch *uff* ‘être gonflé, enflé; souffler’, Zng *yuʔ* ‘gonfler’, *af* ‘souffler’, Rif, Qab *uff* ‘enfler, gonfler’, etc. [NZ: 506f]. For Berb ‘to swell’ cf. C 2 Mrg *fifi* ‘swollen’ [HfM: 23]; 3 Hya *fyiye* [BlH] ‘to swell’; W 3 Kupto *ʔòfiyà* ‘swelling (of the body)’.

a. Derived noun *\*fufu* ‘lungs’: W 1 Hs *fùufuu*, *hùuhuu* > 2 Mpn *fùufiú* 3 Bol *pìuupu*; C 1 Tera *fufuf* [NmT], Gaa *pìpif-á* [MN] ‘lungs’.

//Cf. Eg *wf<sup>2</sup>* (Totb) ‘die Lunge’ [EG I: 306].

Note Eg *f<sup>2</sup>* ‘to blow’ (apud [GrL: 300]). Accord. to [EDE II: 553f], ‘Meaning and origin [of Eg *f<sup>2</sup>*] obscure. Perhaps ‘to have (bad) odor?’ [Nm *\*fi*, ISv: 21, AA 1 N<sup>o</sup>70, HSED N<sup>o</sup>797]. Cf. CCh *\*v* (“the change *\*v* > *f* is regular in n Proto-Margi and Proto-Kotoko Island”) [GrR].

b. **\*fVH-** ‘to blow, to winnow’: W 7 Bok *fu<sup>2</sup>*, DB *fū<sup>2</sup>* ‘blasen’, Sha *fyah* ‘blasen (Flöte, Horn)’ [JgR]; C 5 Hdi *vihay* (regr. spirantization) ‘to winnow, whistle’; 7 Mada *fāáh* ‘légèrement (bruissement du vent)’.

//Sem Arab *nfh* (a) ‘souffler (d’un vent froid)’ [BK II: 1305].

<sup>38</sup> On ‘onomatopoetic/ideophonic’ origin of roots for ‘blowing’ in *f*-initial see [JgIB I: 15]. Note, on the other hand, that verbs for ‘blowing’ differ in their semantic components – ‘to blow, to dry’/‘to blow, to winnow’, etc.

**291. C \*fV(y)- ‘to place, put’:** 2 Klb *fiyà* ‘to put down’ [MuK]; 3 Bana *fâ* ‘poser’, FK *fâ*, *fâyì* ‘to put’; 5 Glv *f* ‘to do, set, put, to lay’, Mlg *fâ* ‘bauen, stellen, legen’, Pod *fa* ‘to place, put’; 7 Mada *éfe*, Imp. *fe*, *fe-ma* ‘mettre, poser’, Muy *áfáy* ‘to put’ (single obj.), Ould *-fāwō* ‘poser qqch et partir’, Mafa *fa* ‘mettre (pl. objets)’; 7a Skn *fâ* ‘to put down’.

**a. W \*fVw- ( pl. in -w-) ‘to throw, sow’:** W 2 Mghv *fwo* ‘to throw’ pl. [BIM], Mpn *foo* pl. ‘to sow, broadcast, throw many things’, Ngas *fwo* ‘to throw down, away’ [JgN], Goem *fū* ‘to scatter or sow smth.’ [Hlw]; 3 Bele *fóyí-kò* ‘to throw’ [SchB].

For a derived noun cf. W 1 Hs *fâyau* ‘a game of disc-throwing’.

**292. \*fa<sup>2</sup>-/\*fi<sup>2</sup>- ‘to scrape (off), rub’:** W 2 Mghv *fee* ‘to clean, drag’, *fee-fee* ‘to sweep the farm’ [BIM], Mpn *fáò* adj. ‘clear of vegetation’; 3 Kupto *fiyéy* ‘to bark off, decorticate’; 7 Sha *fēf* ‘jucken’ [JgR]; C 2 Bura *fova* (< *fofa*) ‘to rub, wipe off (dust or damp)’ [BIB]; 3 FK *fâ<sup>2</sup>* ‘to rub’; 7a Skn *fow* ‘itching’; 8 Kus *fe ho* ‘to peel (+ms’al) ‘pluck (chicken)’ [AlK]; 9 Mlw *fi*, Mnj *fī* ‘racler, polir’; 10 Dari *fâ<sup>2</sup>* ‘to scrape to make lisse’, Dzpw *và<sup>2</sup>à* ‘gratter pour lisser’, Masa *fòò* ‘ôter (vêtement)’ [CC]. Cf. W 2 Mghv *fee* ‘ziehen, eggen’ [JgS], C 7 Gis *fe* ‘Boden bearbeiten, hacken’ (‘to scrape a field’ ?).

Derived noun: W 2 Ngas *fwoop*, *foop* (pl. in -p) ‘the shell of an egg, snails, etc, but not the bark of trees’ [Fl], *fóp* ‘husk, hull’ [JgN], *fop* ‘bark’ [Kr]; C 8 Bud *fóu* ‘Haut’ [LkBd]; E 1 Kera *fáyá* ‘Lepra’.

//HECush *\*fiy-* ‘to sweep’: Sid *fea*, Gede’o *fe*, Had *fii<sup>2</sup>*- [Hds], Saho *fiye* ‘to sweep’ [Vr], Arb *fayya* ‘to clean’ [Hay].

Cf. [TN №480].

**293. \*fVw/y- ‘to tell, call’:** W 5 Zaar *fuu* ‘to tell’; 7 Sha *fī* ‘sagen’ [JgR]; C 5a Hdi *fay* ‘to sing’; 8 Bud *fě* ‘appeler’ [Awg], Makari *fe* ‘to call’ [AIM].

//Sem Arab *fwh (u)* ‘prononcer (un mot, discours); parler’ [BK II: 649].

**294. \*fV(y)-/\*HVf- (< \*fVH- ) ‘to go up, rise’:** W 7 Sha *wâfây*, Karfa *hâf* (metath.) ‘to mount’ [RC]; C 9 Mulwi *fī* ‘emporter dans les airs (oiseau de proie)’, cf. Musgu *afa*, *e*fe ‘up (?)’ [LkM]; E 1 Kera *fâ* ‘sich erheben, se lever’.

Derived noun: C 5 Mlg *fâya* ‘Himmel, sky’, cf. W 6 Duw *àafâ*,

WBade *afâ* ‘sun’.

//Sem Arab *yfʿ* ‘to mount’ [BK II: 1631], Sab *yfʿ* ‘go up, rise’ [SD: 168, Bl: 233], SOmot Dime *fuh-* ‘to climb’ [BnA].

Cf. TN №388 \**pʿ* ~ \**ffʿ* ‘to rise, swell’.

**295. C \**fVyʷ*- ‘to decrease’:** 7 Mofu *-fâfiy-* ‘diminuer’; 9 Mnj *fiyi*, Mlw *fiyi* ‘diminuer’; 10 Dzpw *fâi* ‘diminuer’, *féʿé* ‘(se) rétrécir’.

Cf. 9a Gdr *mù-fiyá* ‘small’ [FrG]; 10 Dari *fây* ‘small, piece’.

//Sem Arab *fhh* ‘être faible, débile’ [BK II: 640f]. Note W 3 Kupto *fihé* ‘stupid’ as an Arabism.

**296. \*(*V*)*fVyʷ*/*w*-/\**fVʷVw*-/*y* > *vVw*, *fyf* (compensatory redupl.) ‘to roast’:** W 3 Tng *pipe* ‘to roast’, Bol *pèeyu* ‘to roast directly on fire’, *pau* idf. ‘indicates hotness’ [GAB]; 7 Kul *fyef* ‘rösten’ [JgR]; W 5 Guus *vaa* ‘to burn, grill’, *vay* ‘hot’ [CrG], Zaar *vaa* ‘to heat up, burn; be hot’ [CrZ], Grnt *vu*, Tala *huu* ‘to roast’ [Cs]; C 1 Hona *fy-*, Tera *vi* [NmT], Gabin, Gaa *fiʷ* ‘to roast’ [Kr]; 8 Kus *viow* ‘to bake in ashes, roast’ [AlK], Bud *fěw* ‘griller, brûler’ [Awg]; 9 Mbara *fèè* (or *fěé*) ‘to grill’; E 2 Kaba *puwə* ‘to roast’ [Jglb].

Compensatory redupl. (in Tng & Fyer) and *v-* in W 5 and in Kusery point to a laryngeal.

//Sem \**ʷpy/w* : Akk *epû*, (*apû*) (OB on) ‘to bake’ [CAD e: 247], Phn *ʷpy* ‘to cook, to bake’ [HJ: 94], Aram (Emp) *ʷpy*, (Syr) *ʷepā* (Mand) *apa* ‘cuire’, Ug *ʷpy*, Hbr *ʷāpā* (*ʷpy*) ‘to bake’, Geez *ʷafaya* ‘to bake’, Sab *ʷfy* ‘baked’ (= ‘sort of foodstuff’) in [SD: 3] [DRS: 28, DUL I: 89, Bl: 25, LsG:10].

**297. \*(*V*)*fVw*-/\**fVʷVw*- > *vVw*, *fwf* (compensatory redupl.) ‘to smell, (bad) smell’:** W 2 \**fwVp*: Ngas *fwēep* ‘to smell, sniff; a smell, a stink, also a pleasant smell’ [F1], *fwèep* ‘smell, stink’ [JgN], Mghv *fwàap*, *fwàɣàp* (internal k- pl.) ‘odour, smell’ [BlM]; 6 Ngz *fóowā* ‘stench’; C 8 Bud *pho* ‘verfault sein (Fleisch)’ [LkBd], Makari *fio* ‘odour, to smell’, Log *via* ‘smell’, *vi* (<*fiʷ*-) ‘to stink, smell bad’ [Al].

Note that *v-* in Log and compensatory redupl. in W 2 point to a laryngeal (in pre- or postposition)

//Sem Arab *fawʿ-at-* ‘odeur qui se répand partout’ [BK II: 646], Geez *ʷafaw* (pl. *ʷafawāt*) ‘sweet odor, scent’ [LsG: 10].

For W 2 \**fwVp* < AA \**bwb* see [TN №312].

**298. *\*(wV)fiy- > fVy-, vVy-* ‘to receive, find, obtain’:** W 3 Tangale *piye* ‘to receive, accept’; C 2 Chb *fa* ‘nehmen, bekommen’ [HfC]; 10 Masa *fi* ‘trouver’ [CC], Dzpw *fě* ‘obtenir, recevoir’, Marrba *fe*, Musey *fi*, Peve *fie*, Hedè, Zime *fe* ‘to obtain’ [Shy], Musey, Marba, Masa *v-*, Peve *vie* (< *\*wfy*), Hedè *fe* ‘to receive’ [Shy]. Gizey, Masa, Ham, Musey *fi*, Lew, Marba *fě* ‘recevoir, trouver’ [LexC], Musey *fi-ra* ‘recevoir, trouver, gagner’ [ShyM].  
‘to pay’ see Ch *\*p(Vw)ay<sup>2</sup>-* ‘to pay, give’.

For reflexes in some masa languages see [TN №380 *\*ph*].

//Sem Geez *wfy* ‘receive, grant, transmit, hand over, deliver, transfer’ [LsG: 607]. For Geez *wfy* ‘to hand over, deliver, transfer’ < Sem *\*w<sup>2</sup>py*  
a. *\*<sup>2</sup>afVy-* ‘to seize, catch, take’ (either, Caus in *\*<sup>2</sup>a* from *\*fiy-* ‘to receive’, or – an independent root): W 2 Goem *fyàp* ‘to snatch at smth’ (< *fyaf*, compensatory redupl. < *\*<sup>2</sup>afVy*. Ch *\*-P#* > W 2 *-p#*) [Hlw]; C 3 Bura *fa* ‘to take’ [BIB]; 3 FK *fǎ’* ‘to pick up a quantity of things’; 5-10 *\*vVy-* (< *\*<sup>2</sup>afVy-*): 5 Glv *vay* ‘to catch’; 7 Mofu *-v-* ‘arracher de force, saisir’; 10 Gizey, Masa, Ham, Musey *vì*, Lew, Marba *vè* ‘saisir, accepter’ [LexC], Musey *vi-ra* ‘prendre, attraper, tenir, saisir’ [ShyM], Dzpw *vè* ‘accepter’, Dari *vīē* ‘prendre qqch présenté’, Masa *vì* ‘attraper, atteindre, saisir’ [CC].

For possible derived nouns cf. C 9 Mnj *ava* ‘filet’; E 1 Kera *vèw* ‘piège’.

**299. *\*wVfVh- > fwV/vwV* ‘to boil, heat’:** W 4 Kar *vuu*, Paa *vùvu* (< *wuv-* < *wVf-*), Mburku *vīy-*, Tsagu *vi*, Siri *wuyū* ‘to boil’ [SkNB, MS], Wrj *vúwú-nà* ‘boiling’, cf. *vúwù-nà* ‘three stones for cooking, fireplace’ [BIS]; C 3 Bana *wǎfǎ* ‘cuire la viande un peu le matin pour que ça ne pourrisse pas avant le soir quand on va la préparer bien et la manger’, FK *fívù* (< *fifu*, compensatory reduplication) ‘to boil’ [Kr]; 5 Pod *ufá* ‘to heat, boil’; 5a Hdi *fway* ‘to heat, boil’; 7a Skn *fowa* ‘to heat liquid’, *fwa* ‘to warm (of liquids)’, *mu-fwan* ‘heated, warm’.

//For a metath. see Sem Arab *fwh* être en ébullition, bouillonner (se dit d’une marmite)’ [BK II: 644].

**300. C 8 *\*fa* ‘to bury, sow’:** Makari, Kus *fa*, Log *fa-* [Al], Bud *fa* [LkBd] ‘to bury, to sow’, Makri *fa go* ‘to cover, close’.

//SCush Qwadza *fo<sup>2</sup>-at-* ‘to bury’ [Eh: 152].

Consider the following isogloss as a possible derivative:

a. W **\*fV(w)VH-** ‘to close, cover’: 3 Bol *f(a)* [LkB], *paa* [GAB] ‘to close’, Krf *fe<sup>ʔʔ</sup>* [Stl], Krkr *faa* [GK], Glm *pyáa-*, Bele *fè<sup>ʔʔ</sup>yú-kò*, Grm *fée-* ‘to close’ [SchB], Ngm (dial.) *fa<sup>ʔà</sup>*, *há* ‘to cover, close’ [NEH]; 7 Kul *fu* ‘schliessen’, Sha *vu*, DB *voh*, Bok *vo* ‘schliessen, bedecken’ [JgR], Tambas *fwa*, Karfa *fwá:y*, Bok, Monguna *vo*, Sha *vu*, ‘to shut, close’ [RC]; C 5a Hitk *f-* ‘Schliessen’  
 //Cf. Sem Arab *hfw* ‘être caché à qqn, être à la connaissance de qqn’ [BK II: 1430].

**301. \*HVfVy-** ‘rainy season’: W 3 Kupto *fóó* ‘rainy season’ (pl. in –w-?, cf. W 7 ); 4 Paa *fáfiya* (compensatory redupl.) ‘rain’ [MS]; 7 Bok *fu*, Monguna *fi*, Mundat *fyôw* Mangar *fî*, Fyer *fû*, Tambas *fuu* ‘wet season’ [RC]; C 2 Mrg *viya*; 3 Hya *fà* ‘rain’ [BIH], HG *gáfiya* [Kr], FK *viyá* ‘rainy season’; 5 Mlg *viya*, Lmn *viya* [Wff], Hitk *viyà* ‘rainy season’; 6 Buwal *viyā* ‘wet season’, Mina *vi* ‘rainy season’ [FrM], Daba *viyà* ‘rainy season’; 7 Mafa *viya*, Zlg *viye*, Mada *vya* ‘saison de pluies’, Ould *lā-viyò* ‘pluvieuse’; 7a. Skn *vi* ‘rainy season’.  
 Cf. [TN №326] *\*by* ~ *\*py* ‘rain’, CCh *\*viya* ‘rainy season’ [GrR].

**302. W 7 \*faw-** ‘mouth’: Bok *fò* ‘mouth, face, front’ [BIR], Monguna, Mangar *wo*, Fyer *fo*, Tambas *fwoi*, DB *fóó* ‘mouth’, Fyer *fufwo* ‘door’ [RC].

Denom. in *\*ʔ-*: W 1 Hs *áfà* ‘to throw into the mouth such things as tobacco in powder form, or a number of groundnuts’.

//Sem Akk *pû* ‘mouth, command, order, advice, mind, speech, language, opening (of a part of the body), entrance’ from Oakk on [CAD p: 453], Ug *p* ‘mouth, snout; orifice, vulva’, Phn *py*, Aram *pm*, Hbr *pe(h)* ‘mouth’ [DUL II: 647], Geez *ʔaf* (pl. *ʔafaw*) ‘mouth, beak, entrance, brim, orifice, border’, Arab *fū* (in construct status), Sab *f* ‘voice, mouth’, Tgr, Tna *ʔaf*, Amh, Harari, Gur *af*; also in Cush, etc. [LsG: 8f], Sem *\*pay/w-* [Kg: 221]. SCush *\*ʔafó* ‘mouth’ [Eh: 281], rift *\*ʔafa*: Irq, Gor, Alg, Bur *ʔafa* [Kies], PEC *\*ʔaf-*: Som, Saho, Afar, Rend, Boni *af*, Dasenech *ʔafu*, Oromo *af-aan* (pl.), Konso *af-aa* (pl.), Sid, Darasa, Alb *af-o*, Burji *afa* ‘mouth’, Had *ʔaf-o(?)o* ‘hole’ [SsB], Beja *yaf* ‘mouth’ [RBd].

[Coh №380, Dolg: 231 Cush *\*ʔAp* ‘mouth’].

**303. \*fVdVʔ-/\*fVdd-** ‘to blow (fire)’: W 3 Kupto *fiddéy* ‘to blow fire,

set/strike fire', *fiddēy* 'to whistle'; 7 Kul *fūd* 'blasen', Sha *fud* 'blasen (Feuer)' [JgR], DB, Monguna *fū?*, Bok *fu?*, Sha *fud* 'to blow (mouth)' [RC]; C 8 Log *fīd-un a* 'to blow up, inflate' [AIL]; 10 Azum *fodä* 'to blow, breathe'.

//SCush rift *\*fudu?* 'to blow': Bur *fudu?*, Irw *fuuruu?* [Kies].

Derived noun: *\*fud-* 'wind, harmattan': W 3 Kupto *fúddò* 'harmattan, dust, cloud'; C 5 Gdf *fudē*, Gava, Chk, Chn *fuda*, Glv *fudā* 'wind' [HmG]. Cf. C 9 Msg *fodú-m* (with a body-part' suff.) 'Bauchwind' [LkM].

//SCush *fudu?aa* 'wind': Bur *fudu?umee* 'blowing and howling of wind', Irq, Gor *fur?a*, Alg *furu?aa* 'wind' [Kies].

**304. \*fVd(VH) > fVd-** 'to fight, to kill': W 1 Hs *fàada* 'to quarrel, fight'; C 9 Msg *fáda* [LkM], Mbara *fād* 'to kill', Mlw *fidí* 'tuer, faire mal', Mnj *fidí* 'tuer, abbatre (arbre)'.

//Cf. Sem Akk *pādú* 'merciless, pitiless, unsparing' MB, SB [CAD p: 7], 'schonungslos (Waffe); ruthless, merciless (weapon)' [AHw: 808].

**305. \*fVHVd-** (note a long vowel in Krkr) > *\*fVd-* 'to gather, roll up, pack': W 3 Krkr *fèedu* 'to roll up' [GK]; C 4 Gude *fədā* 'to roll up (mat); gather together and take away'; 5 Mlg *fáda* '(zusammen) rollen, falten', Pod *fada* 'assembler, enrouler'; 7 Mofu *-fad-* 'rouler, enrouler', Mada *óffod* 'enrouler, envelopper', *offód* 'anneau, bague', Muy *éfèdēy* 'to roll up', Gis *fod* 'zusammenrollen', Mol *faday* 'to fold' [FsM]; 9 Mnj *fidí* 'enrouler, envelopper; emballer', Mlw *fidí* 'enrouler'.

Deriv. C 7 Mada *óffodo-và* 's'enrouler'.

The following (derived) nouns support the original semantics 'to gather':

C 8 Kus *fudu* 'heap' [AlK]; E 1 Kera *fáada* 'Versammlung, réunion'.

For a root variant see . 419. C *\*pad(VH) > pad-* 'to wrap, bandage'.

**306. \*faHVD- > fad-/\*fad-** 'to fall, put': W 1 Hs *fáadi* 'to fall down', *fáadā* 'to throw o.s. into the water'; C 7 Mol *fad* 'to put, set down' [FsM]; E 2 Lele *pādīwí* 'tomber'; 5b Mubi *fúudi*, pl. *fádé* '(faire) tomber' [JgM].

//ECush Ong *fad-* 'to put down' [SavT].

a. W 6 Ngz *vàdú* (< HVfVd-) 'to lie down'.

//Eg *hfd* Totb, NR 'sitzen, sich setzen' [EG III: 75].

**307. C \*fid-** ‘to shave, peel’: C 3 Bana *f(á)dí* ‘peler, enlever’; 4 Gude *faadā* ‘to peel with knife’; 5 Hdi *fiday* ‘to peel’; 6 Mina *fād-* ‘to shave’ [FrJ]; 7 Chuv *méfādēy* ‘déchaumer (champ)’, Mbuko *fuday* ‘raser’; 9 Mbara *fid*, Mlw *fidí* ‘raser’.

a. **\*fid-** ‘to cut ears (of corn), harvest’: C 7 Mafa *fid-* + *daw* ‘mil’ ‘couper un épi pour le mettre à sécher’; E 1 Kera *fédé* ‘Hirse ernten’. For a possible derived noun cf. C 7a Skn *vid* ‘sickle’ [ThS: 23]. Cf. C 7 Mofu *-fáfád-* ‘inciser, couper la peau pour arracher (une épine)’. //Sem Arab *hfd* ‘tondre; to mow’ [BK I: 456].

**308. C \*fad-** (< Ch *\*fVd-*, cf. Eg) ‘to sweep, wipe’: C Chuv *méfédēy* ‘nettoyer’, Zlg *fádá* ‘balayer’, Mafa *fad-* (+ *mbar* ‘huile’) ‘enduire d’huile’; 8 Makari *fadi* ‘to wipe bottom’ [AIM]. Secondary *-d-*. //Eg *fd* (Pyr) ‘etw abwischen, fortwischen, to wipe (off)’ [EG I: 581]. For alternative cognates see [EDE II: 607-609]

**309. W \*fad- > fad-** ‘disease, pain’: W 3 Tng *pada* ‘sickness, disease’, Bol *pādā* ‘pain, sore’ [GAB], Krkr *fādāa* ‘pain, ach’ [GK], Ngm (dial.) *fadā*, *hòdā* ‘pain’ [NEH], Kupto *fādā* ‘sickness, pain, disease’, Pero *pidā*, *pidá* ‘pain’, *peddō* ‘to hurt’, Dera *pəri* ‘to pain’ [NmK]. Cf. C 5 Glv *fada* ‘fever’. //Sem Geez *fawd* ‘tribulation, suffering’, Amh *fayd* id. [LsG: 172].

**310. \*fVHVd-** ‘thigh’: C 1 Hona *fūda-ra*, Gaa *fūda-tà*, Gbn *fidā-tà*, Boka *fūdā-tā* ‘thigh’ [Kr], Hona *fāda-ra* ‘thigh’ [Meek]; E 5a Jegu *paado* ‘Oberschenkel’, Brg *fāadi*, Mubi *fūúdi* ‘thigh’ [JgIb], Kaj *fūudi*. Cf. E 5a Mig *pàatè* (< *fad-at-*) ‘cuisse’. //Sem Arab *fahd-at-* ‘fesses, derrière’ [BK II: 641].

**311. \*f(w)Vd-d- > fVr-d-/fVdd-** ‘four’: W 1 Hs *húdu*, *fúdu* [JgIb]; 2 *\*fVr#* (< *\*fVd-[d]*, note that Ch *\*CVd/t-* > W 2 *CVt#*), Mghv *fēer* [BlM], Mpn, Mush [JgO] *fēer*, Ngas *fīir* [JgN], Grk *pro* [BIY], *píró*, Mnt *fei* [JgC], Goem *fār* [Hlw]; 3 Bol *p’or-do* [Kl], *pòddō* (< *fod-dō*) [GAB], Krkr *fēedu*, Dera *páráu*, Tng *padau* [JgIb], Maka *padúu* (< *pad-dúu*, assim.) [SvP], Ngm *hòdō* [NEH], Gera, Grm *fúdu*, Glm *páryá*, [SchB], Bure *pódó*, Kupto *fādāw*; 4 Kar *fudū*, Diri *fidii*, Miya *fudū*, Pa’a *fādū*, Tsagu *fādā*, Siri *bū-fādii*, *bi-fid-di* [*\*f-d-* SkNB], Paa *fāadu* [MS], Miya *fādā* [Sch], Wrj *fādī* [BIS]; 6 Ngz *fúdu*, Duw *fādū*, Bade *fādu*; 7 Sha *fūd*, Fyer *piit*, DB *pú?* [JgR], Richa (Kul) *fūud* [RC]; C 1 Tera *vāt*

[NmT], Gabin *fwəda*, Boka *fwəda*, Hona *fada* [Kr]; 2 Bura *fwar*, Chb *fōdū*, Klb *fōdū* [Kr], Mrg *fōdū* [HfM: 20]; 3 Bana *fādā*, FK *fwādā*, Kap *fwadē*, HN *fwàre* [Kr], Hya *fwudī* [BIH]; 4 Gude *nfāda*, Gudu *fwad*, Nzn *fwat*, FM *fwat* [Kr], Bch *fwat*, Bata *fwot* [Sk], Jimj, Sharwa *fwát*, Gude *umfát*, Tsuvan *əfwát*? [BryJ]; 5-5a Mlg *ufāde*, Dghw *fide*; Gdf *ufade*, Gava *ufad*, Chn, Glv *ufada*, Gvoko *ofado*, Lmn *ufada*, Hdi *f<sup>w</sup>ad*, Vemgo *uf<sup>w</sup>ad* [HmG], Wnd *ufade*, Lmn *ufádó* [JgIb]; 6 Daba *fōd*, Buwal *ñfát*, Mbedam *ñfad* [LMb], Mina *nfád* [FrJ]; 7 Chuv *fād*, Muy *fād*, Baka *wufad* [BAS], Mafa *fād*, Ould *māfād*, Merey *fad*, Mbuko *fédó*, Mol *māfad*, *əwfad* [FsM], Mofu *māfād*, Gis *mufad*, Dugwor *ñfād*; 7a Skn *fwad*; 8 Zina *fódi*, Log *gádé*, Kus *kádé*, Afd, Maltam, Makari *gádé*, Mazera *fūdé*, Zina *fóodi* [Sol: 166, TrN with a discussion]; 9 Mnj *puđu*, Mbara *púdi*<sup>39</sup>; 9a Gdr *podó* [JgIb], *pódó* [FrG]; 10 Dari *fādi*?, Musey *fidi*, Masa, Marba, Peve *fādi*?, Hede *fidi*?, Ngide *fādi*, Zime *fidi* [Shy], Gizey, Masa, Ham *fidi*, Marba *fidi* [LexC], Azum *fidi*; E 2 *\*p-r* < *\*f-d*: Lele *pōriŋ* [JgIb], Kaba, Nch *pəri*, Gbr *porin* [Luk]; 3 Smr *wódii* [Luk]; 4 Saba *pa'a*, Ubi *pora*, Mawa *par* [HuJ], Ubi *podā* [Alio]; 5a Mig *póodi*, Bid *paadaŋ*, WDng *pòot*, *pòod*; 5b Mabire *pot* [JnH], Jegu *food*, Brg *fòodi*, Mubi *fādā* [JgIb], MM *faat*, Tor *fòoda*.

//Eg (OK) *fdw* ‘four’ [EG I: 582].

For Chadic data see [Nm *\*f<sup>w</sup>adə*, JgIb *\*-pd*], for references - [EDE II: 599].

Note that only the PCh *\*fVd-d*-form accounts for all the manifestations of the root in Chadic languages. For the same suff. in numerals see: Ch *\*kVn-d*- ‘three’, *\*cir-d*- ‘two’, CCh Mafa *sta-d*, Mofu *té-d* ‘one’. The suffix can be traced in the bole gr. by assimilation: Bol *poddo*, Maka *padđu*, assim. < *fVd-d*-. Forms in W 2 (namely, *\*fVr#*) follow Ch *\*fVd*- < *fVd-d*-, while Ch *\*fVd*-> W 2 *fVt#*. In other languages *\*fVd-d*- > *\*fVdd* > *\*fVdd*- > *\*fVd*- > *fVt#*. For *k*- in kotoko numerals see [TrN].

[Gr: 57, ISv: 21].

**312. *\*fVt*- ‘to blow, to start fire’:** W 3 Kupto *fītéy* ‘to blow’, Bol *fitt*- ‘anblasen (Feuer)’ [LkB]; 5 *\*fwat* (internal –w- pl.) Zaar *fot* ‘to blow, winnow’ [CrZ], Plc *fwaat*, Zul *hori*, *fwari*, Geji *hooti*, Dott *fwat*, Buli

<sup>39</sup> Irreg. *p*-. Probably, due to regress. assim. of a spirant: *f-d* > *p-d*-.

*farən* [Cs №726], Dyarim *fātà*, Guus *foṭ* ‘to blow (with mouth), winnow’ [CrG]; 6 Ngz *fiitú* ‘to blow on, start fire’, WBade *fiitu* ‘to start fire’, Duw *fiuto* ‘to blow’; C 5 Dghw *fiṭà* [JgIb], Pod *fāta* ‘to blow’; 6 Buwal *fēt* ‘to blow with mouth’, Mbedam *fātéw* ‘to blow on’ [LMb]; 7 Mofu *-fāt-* ‘éventer en soufflant, souffler’; Chuv *méftèy* ‘souffler’, Mbuko *fefet* ‘siffler’, Mafa *fit-* ‘souffler sur’, Baka *-vete* ‘souffler (vent)’ [BAS]; E 1 Kera *vìtì* ‘blasen’.

Derived nouns: a. W 3 Krf *fèttó*, Gera *fètà* (< *fVt-*) ‘wind’ [SchB].

b. W 3 Kupto *fiutá* ‘breath’; C 8 Afd *phih* [fti:] ‘Atem’ [Sol: 267].

Note E 6 Mok *pùutó* ‘soufflet de forgeron’.

//Cf. Sem Arab *fathay-* ‘vent’ (Sem *\*fth* ‘to open’) [BK II: 533].

a. **\*fVfVt-** > **avat-** ‘to fan’: W 1 Hs *fiifiitaa* ‘to fan food to cool it’, *fiifiitaa* ‘fanning a person’; 2 Goem *fyuut* ‘to fan smth or blow on smth to cool it’ [Hlw]; 4 Zaar *vat* ‘to fan, blow’ [CrZ]; C 5 Mlg *váta* ‘fächeln, ventilieren’; 7 Ould *-vâtày* ‘éventer, souffler le feu’, Muy *ávātā* ‘to blow’, *évitēy* ‘to blow (off)’; 10 Giz, Masa, Marba, Ham Lew, Musey *vèt* ‘éventer’ [LexC], Azum *veta* ‘to fan’; E **\*pVpVt-**: 1 Mobu *pebde*, Ngam *pepeté* ‘s’éventer’; 3 Ndam *pədà* ‘s’éventer’; 2 Tob *pà-bdé* ‘éventer’.

Derived noun: C 10 Azum *avevet-na*, Musey *vevedta* ‘a fan’ [ShyM].

Cf. C 5 Guus *vaatā* ‘bellows’ [CrG].

//Berb Wlmd, Ayr *fatfat* ‘ventiler, éventrer’ [NZ: 668]. A Chadic loan?

**313. \*fVt-** ‘to sweep, to clean’: W 2 Mush *fét* [JgO], Mpn *fét*, pl. *fāfét* ‘to sweep’, Ngas *fet* ‘to sweep up, clean up by sweepng’ [F1], *fét* ‘to sweep, to clean’ [JgN], Mghv *fét* ‘to sweep’, *fet pee* ‘cleanliness’ [BlM]; 5 Jimi *fotee* ‘to sweep’ [Cs]; E 4 Mawa *piitiṅ* ‘essuyer’.

Derived noun: W 2 Mush *fī-nfét* ‘broom’ [JgO].

//Sem Jib *fett* ‘wipe oneself with small stones after excreting’ [JnJ], Omot Wolt *fit-* ‘to sweep’, Gamu *pitt-/fit-* ‘sweep, wipe, rub’ Dac’e *pitt-* ‘wipe’, Koyra *fit*, Yemsa *fit-* id., Sheko *fid-* ‘sweep’, Wolt *fittiya-go*, Yemsa *futu* ‘broom’ [LmW: 357f]. Omot Yemsa *fūt-* ‘sweep’ [LmY], NWOmoto Wolt *fitt-*, Gofa *pitta*, Malo *fit-*, Gimira *pitt-* ‘sweep’ [BndO: 323].

[AA 1 №58, EDE II 595-6].

a. **\*fat-** ‘to scratch, to shave’: W 2 Ngas *fwat* ‘to scratch ground as fowls do’ [JgN]; C 5 Pod *fāta* ‘raser, to shave’; 6 Buwal *fat* ‘to shave’.

Cf. 10 Dzpw *fāt* ‘ronger’, Dari *fāt* ‘ronger (uniquement pour les vers

qui s'attaquant au bois'.

Cf. W 3 Bol *puutàatà* 'a game involving scraping out holes in sand' [GAB].

//Eg *ftt* Amarna 'vom auslöschten einen Inshrift/to become erased' [EG I: 580], Omot Yemsa *fiit-* 'rasieren' [LmY], Sem Gur (Chaha, Endegen, etc.) *fwäfwätä* 'to make a hole by scratching, scratch the ground' [LsGur: 228].

**314. \*fat- 'to germinate':** C 7 Mol *fatay* 'to grow, sprout, germinate' [FsM], Ould *-fāt* 'germer, pousser', Muy *áfāt* 'to grow (plants)', Mofu *-fáfāt-* 'végéter'; E 3 Ndam *pəžā* 'germer' < *pVd-* < *\*fVt-*.

Note: W 1 Hs *fita* 'to go out, (crop) to germinate', 3 Kupto *fěktá* (internal *-k-* pl.) 'to go out, to come out, to appear; to germinate'; Bol *pàtaa* 'to go out', in Ventive 'to sprout, germinate' [GAB], cf. *fat* 'to go out; to rise (sun)'/ 'hinausgehen; aufgehen (Sonne)' [LkB].

For the same linking of semantics see Ch Paa *mbá* 'to go out, germinate' [MS], Miya *baw* 'to go out, sprout' (№1a. *\*ba[w]-* 'to go out', №3 *\*baw/y-* 'to grow, germinate'). In the present case, we may suggest that reflexes of two independent roots (*\*pVt-* 'to go out' (№422) & *\*fat-* 'to germinate') conflated in WCh Hs and Kupto.

**315. \*fVt- 'to scatter, sprinkle'** W 2 Mghv *fwat* 'to scatter'; W 3 Bol *pìtaa* 'to sprinkle (spices on food, etc.)' [GAB], Tng *pite* 'to spread, sprinkle (powder, ashes, flour)', Ngm *fit-kô* 'to sprinkle on (medicine, etc.)'; 4 Wrj *fufutau* 'adding salt or seasoning to food' [BIS]; 5 Zar *fufút* 'sprinkle powdery substance' [CrZ]; C 7 Mofu *-fáfāt-* 'saupoudrer, verser une petite quantité'; 10 Azum *fata* 'to sprinkle (powder)', Musey *fadía* 'saupoudrer' [ShyM], Dzpw *fāt*, Dari *fāt* 'saupoudrer', *fātát fātát* 'éparpillé absolument partout'; E 5a WDng *pètpidě* (< *\*pet-á-* or *disssim.*) 'saupoudrer'. Cf. E 1 Ngam *pitinyé* 'se dispercer'. Forms like Mofu *-fáfāt-* may follow *\*Hft* (compensatory redupl.).

**316. C \*fVt- 'to cultivate':** 2 Bura *fota/i* 'to clear field for farming' [BIB]; 7 Dugwor *mé-fítéy* 'to cultivate', Zlg *fāt* 'sarcler, cultiver', Merey *fāt* 'cultiver'.

a. W *\*fVt-* 'hoe': 2 Mghv *fèt* 'Berom hoe' [BIM]; 3 Bol *pèeta* 'worn out hoe' [GAB]; 5 Jimi *feeta* 'hoe' [Cs].

Cf. C 8 Afd *fiing*, Makari *ftə* 'Erde' [Sol: 189]; 9 Msg *áfí* 'Boden'

[LkM], Mnj *aftiy* ‘sol, terre’.

**317. \*n/HVfut- ‘to turn back, over’:** W 6 Ngz *vùutú* ‘to turn away, turn o’s back’; C 8 Kus *fte* ‘to go back, return, turn over (tr.)’ [AlK]; 10 Dari *füt*, Dzpw *füt* ‘changer de direction, s’écarter’.

Cf. W 3 Krkr *fitu* ‘to dodge, duck’ [GK].

//Eg *nft* Med ‘verdrehen’ [EG II: 263].

**318. W 2 \*fuut ‘to vomit’:** Ngas *fuut* [Fl], *fuut* ‘to exhale, vomit’ [JgN], Goem *fúut* ‘to vomit smth’ [Hlw], Mpn *fúut*, Mushere *fúut* [JgO], Mghv *fuut* ‘to vomit’.

//ECush dull Gaw *fat-*, *fac-* ‘sich erbrechen’ [AMS]. Eg *ft* Med, Nä ‘sich ekeln; überdrüssig werden; to vomit’ [EG I: 581], for alternative cognates see [EDE II: 590f].

For Ngas-Goem-Eg see [GrL: 300, ISv: 23].

**319. C \*fVfVt- ‘to diminish’:** C 6 Buwal *fēfet* ‘to diminish’; 7 Mofu -*fáfət-* ‘maigrir’.

Deriv. *\*afVfVt-* > *fVwVt-/vVt* ‘small, light’: 2 Mghv *fyoot* (< \**fV<sup>2</sup>Vt*) ‘to be tiny (of a hole)’ [BlM]; 7 Monguna *vaat* Mangar *vât* ‘small’ [RC], DB *vàat* ‘klein, ein venig’ (< *-fat*) [JgR]; C10 Azum *afafeta* ‘light (of weight)’.

Cf. C 7 Mofu *-fət-* ‘prélever une petite quantité, couper en peu’.

//Sem Arab *ftt* ‘affaiblir, fatiguer’ [BK II: 531], Berb Wlmd, Ayr *fatfat* ‘être mince comme du papier’ [NZ: 668].

Note the next issue as a root variant:

**C \*fVd- ‘small, thin’:** C 4 Gude *fädya* ‘very small’; 8 Makari *fafadî* ‘thin’, derived verb: C 10 Azum *fefdä* ‘to diminish’.

//Sem Arab *nāfid-* ‘amaigri, exténué’ [BK II: 1306].

**320. \*fVt- ‘skin’:** W 1 Hs *fàatà* ‘skin (of a person, animal)’; 3 Krkr *faatàa* ‘skin, hide’ [GK], Bol *pàata* ‘small round piece of leather on which a spindle is spun’ [GAB]; C 5a *\*xut-* ‘skin’ (< *\*x-fVt-*, cf. *\*x-čîn-* ‘nose’, alternatively, *\*fu-* > *hu-*, for the same reflex see №327a., note also *fu-* > *hu-* in Hausa): Lmn, Hdi, Vemgo *xuta* [HmG], Hdi *huta*; 7 Ould *àftà* ‘lanières des parures féminines, faites en peau de vache et portées après le premier accouchement’.

Deriv. C 9 Mnj *foto-rok* ‘écorce’.

Derivd verb: C 6 Mina *fāt* ‘to skin’ [FrJ].  
//Om Cara *pata* ‘skin’ [BndO: 120].

**321. \*fut- ‘hole’:** W 2 Ngas *fut* ‘deep hole’ [FI]; C 7 Muy *mà-ftà-tùr* ‘window’ (cf. *tùrà* ‘wide’), *fōtūt* ‘empty’.  
//Sem Akk *pītu(m)* ‘opening’ [AHw: 871], cf. Arab *futt-* ‘fente, crevasse (dans un rocher)’ [BK II: 531], ECush Oromo *futee* ‘anus’ [Grg], Om Shin *futt-* ‘durchbohren’ [LmSh], Eg *wft* ‘durchbohren’ Med [EG I:306]. [AA 1 №57 \*fət ‘hole’].

**322. \*fVt- ‘kind of insect’:** C 8 Afd *phtô* ‘Floh’ [Sol: 132]; 9 Mnj *foto* ‘charançon’; 10 Azum *fotna* ‘borare (insect in wood)’; E 5a EDng *pátpàt* ‘petit insect rouge qui pique’.

**323. \*fVt- ‘kind of antelope’:** W 4 Tsagu *fiite* ‘oribi’ [SkNB]; C 2 Bura *pta* (assim. < \*ft- is regular) ‘reedbuck’; 3 FK *pátà-ká* (assim., *f-d/t-* forms are not attested in [BIFK]) ‘red bush duiker’.

**324. \*(<sup>ʔ</sup>a)fVti ‘sun’:** W 3 Kupto *fiši* ‘sun, (mid)day’, Bol *pòti* ‘sun, daytime’ [GAB], Krkr *fàti* ‘sun, daylight’ [GK], Maka *pòoti*, Ngm (dial.) *fòti*, *hòti*, Krf *fiččí*, Glm *pìzì*, Grm *fiččé* ‘sun’ [SchB], Pero *póori* (< *pooti*); 4 Wrj *fai*, Paa *fei*, Diri *fata*, Kar *afai* ‘sun’ [SkNB]; 5 Grnt *fudim*, Jimi *huto*, Tala *fidi*, *pidi* ‘sun’, Grnt *fùdi*, Jimi *hoto*, Tala *fidi* ‘day’ [Cs], Plc *pidii*, Zul *pàte* ‘sun’ [Cs №406], Guus *fiit* ‘sun, God’ [CrG]; 7 Kul *fat* ‘sun’, Sha *fat* ‘Sonne, Tag, Gott’ [JgR], Mundat, Monguna *fat*, Fyer *vivát* (< *fivat* < *fifat*) ‘sun’, Sha, Mundat *fat*, Monguna *àdáa fāt*, Karfa *abá fāt* ‘God (high)’ [RC]; C 3 *ʔafati* > *avati* > *vači*: Bana *v(ə)čí* ‘soleil, jour’, *fča* ‘jour’, FK *vàčí*, HN *vàči* [Kr] ‘sun’; 4 Jimj *fiátèn* ‘sun, sky’, Tsuvan *fêté?*, Sharva *fêté* ‘sun’ [BryJ], FJ *fií* [Kr], Gudu *fotə* [Meek]; 5 Gdf, Gava, Gvoko *faciya*, Chn *fečiya*, Glv *fačiya*, Lmn *fiti*, Hdi *fiti-k*, Vemgo *fiṭə-k*, Dghw *fič* ‘sun’ [HmG], Wnd *futi* [KI], *vačiyá* [FW], Mlg *vačiya* ‘Sonne, Tag’, *vačite* ‘Tag’, Hitk *fií* ‘Sonne, Tag’; 7 Dugwor *pàt* ‘sun’ (no forms in *f*-initial), Mol *fat* ‘sun’ [FsM], Mada *fat* ‘soleil, jour’, Merey *pat*, Ould *fāt*, Muy *fāt*, Baka *fāt* [BAS], Zlg *pat* ‘sun’ (irregular labial); 9 Msg *fad*, *fat afat* ‘summer, dry season’ [LkM], Mnj *afat* ‘saison chaude et sèche’, *fətiy*, Mbara *fiṭúy* ‘soleil’; 10 Dari *fātá*, Dzpw *fātā* ‘saison sèche’, *fātá* ‘soleil, lumière, journée’, cf. Dari *vàdà* ‘soleil, lumière’,

Azum *fata* ‘sun, day’, Musey *fad-ta*, Peve *vàtà*, Hedè *fùtá*, Zime *fada* ‘sun’ [Shy], Lew, Marba *’àfàt*, Gizey, Masa, Ham, Musey *fàt* ‘soleil, jour’, Gizey, Masa *fàt* ‘saison sèche’ [LexC]; E ‘sun’: 4 Saba *pidó*, Ubi *pidio*, Mawa *pidi*; 5 Mabire *pat* [HuJ], Mig *páató* f., Bid *páato*, EDng *pátó*, 5b Jegu *fóot*, Kaj *fàatì*, Brg *fòotó*; 6 Mok *pèedó*.

//Cf. Eg *’fityw* Pyr ‘Bezeichnung für Götter’ [EG I: 183].

[JgIb *\*p-t*, ISv: 21 *\*phVtV* ‘sun, day’: Bol, Musgu and Margi *fàat*].

**325. *\*(?a)fVt-* ‘flour’:** W 1 Hs *fàtèefatee* ‘mushy food made with flour’; 4 Wtj *fīy-ai*, Paa *fīya*, Siri, Mburku *fīyi*, Diri *afàta*, Miya, Kariya *fii*, Tsagu *fīye* ‘flour’ [SkNB], cf. Paa *fítá* ‘dust’ [MS]; ‘dust’; 3 Kupto *fító* ‘salt’; C 9 Msg *afdi* [LkM]; 10 Musey *fudta*, Marba, Peve *fūt*, Hedè, Zime *fut*, Peve *fur* [Shy], Gizey, Ham, Musey *fūt*, Masa *fútúw*, *fút*, Lew, Marba *’àfút* [LexC], Dzp *fút*, Dari *fūt* ‘farine’, Azum *afuta* ‘flour, powder’; E 5a WDng *pùttiya* ‘farine de mil rouge hâtif, mélangée avec l'eau et versée en libation sur un mort’.

[JgIb *\*pt-* ‘flour’].

Presumably, a derived noun, for the corresponding verb cf. Sem Arab *ftt* ‘écraser, broyer, piler’ [BK II: 531], Proto-WSem *\*ptt* ‘to crumble’ [Kg: 95], Berb MC *ftuty* ‘s’effriter (terre), être réduit en poussière, tomber en poussière’, *aftuty* ‘réduit en poussière; poussière très fine’, Izn *seftutiy* ‘émietter’ [NZ: 674f]. Alternatively, Ch ‘flour’ may derive from *\*fVt-* ‘to scatter, sprinkle (powder, ashes, flour)’ (see above).

**326. *\*fVt-* ‘to dry’:** W 3 Gera *fèed-mí* ‘to dry up’ [SchB]; C 5 Pod *fite* ‘sécher le mil germé’.

a. C *\*fVt-* ‘dry’ adj.: 5 Pod *fít* ‘dry’; 8 Makari *fta* ‘dry, not wet’ [AIM].

b. *\*fVt-* ‘to spread clothes for drying’: W 3 Tng *pate* ‘to spread clothes out for drying’.

Deriv in *-r-* (pl.): *\*fVtVr-* ‘to spread out to dry’: W 3 Krkr *fàtàru* ‘to put out laundry to dry, spread things out’ [GK], Ngm *fitrô* ‘to spread out to dry’ [NEH]; C 7 Mada *áftal* ‘étaler, étendre (pour faire sécher)’, Zlg *fātál* ‘étendre, déployer’, Ould *fātāl* ‘étaler’.

**327. *\*fVt/t-* ‘to strike, break’:** W 6 Bade *fàftu* ‘to break off’; C 6 Ould *-fātày* ‘taper, frapper’, (deriv. or pl.) *-fātàhá* ‘castrer’; E 5a WDng

*pàatè* ‘frapper d'un coup, avec un bâton ou de la main’.

//Sem Arab *fīʔ* ‘frapper qqn sur le dos; jeter par terre; casser, briser; aplatir’, Arab *fīḥ* ‘frapper avec un bâton’ [BK II: 609f].

**328. \*fV(wV)t/t-** ‘to roast’: W 7 Kul *fut*, Sha *fʷôt* ‘rösten’ [JgR], Monguna *fot* ‘to bake, burn fire, roast’, Karfa *fwòt* Mangar *fot* ‘to roast’ [RC]; C 4 Mwl *ʔufùtà*, FJ *fcə*, FM *fùci*, FB *fici*, Gude *cà* (< *fcə* < \**ft-*), Nzn *fità-di* ‘to roast’, Mwl *ùfùta*, Gudu *fiyá* (< \**fita*) [Kr]; E 2 Lele *pādī* ‘griller, cuire à la braise’ (alternatively, may be cognate with Sem Arab *fʔd* ‘cuire (le pain) sous les cendres, faire rôtir les viandes au feu’ [BK II: 527]).

Derived noun: C 6 Buwal *fàtàn* ‘spark’.

Derived noun: \*(*ʔa*)*fVwVt-* ‘(hot) ashes’: W 2 Grk *fát* [BIY], Ngas *fwat* [Fl, JgN], Mpn *fwát*, Mghv *fwat* [BLM], Mush *fwat* [JgO], Chip *fwət* [Kr]; 5 Jimi *hotoo* (< *fotoo*) [Cs №358]; 7 Fyer *futù*, Bok *ʔafùt*, Karfa *ifyát* [RC]; C 4 Bch *fīto-dīže* [Sk], Tsuvan *fúcé* ‘ashes’, cf. Jimj *fācán* ‘salt’ [BryJ]; 5 -5a Hdi *huti-dif*, Lmn *xuci-difi*, Hdi *xuti-dif* (\**fu-* > *hu-*), Dghw *fcuʔe*, Gdf *fce*, Gava, Chk, Chn *fca*, Glv *afca*, Gvoko *fāču* [HmG], Chn *fāčà*, Gdf *fācè* [Kim]; 7 Baka *viti* [BAS], Mada *áftà*, Gis *ʔafco*, Muy *vītī*; E 5b Kaj *fitàatàw*.

//Sem Geez *wft* ‘burn, cook’, Sab *wft* ‘burn’ [LsG: 607, Bl: 136].

**329. W \*fVt/t-** ‘to throw’: W 2 Mghv *fwèt* ‘werfen, schlagen’ [JgS], Mpn *vwét* ‘throw away’; 3 Bol *fatt-* ‘werfen’ [LkB], *pàttu* ‘to throw away’ [GAB]; 6 WBade *fātu* ‘to throw’; 5 Guus *vot* ‘to drop’ [CrG].

a. \**fVt/t-* ‘to descend’: W 6 Duw *àfto* ‘to lie down, incubate eggs’; C 7 Mol *fatay* ‘descend’ [FsM].

//Cf. Sem Arab *fīʔ* ‘frapper qqn sur le dos; jeter qqn par terre’ [BK II: 609]. Terms for ‘to throw’ & ‘to strike’ are confused in WCh 2 Mghv and in Sem Arabic.

Differently see in [TN №№338, 339].

**330. \*fV[t]-** ‘to slaughter’: W 2 Mghw *fēt* ‘schlachten’ [JgS], Kofyar *fēt* ‘to cut’ (apud [TAS:106]); C 6 ‘to slaughter’: Mina *fāt* [FrJ], Buwal *fat*, Mbedam *fāt* [NdP], Gavar *fat*, Musgoy *fat* [Mo: 24]; 9a Gdr *fōtù* ‘to slaughter’ [FrG]; 10 Ham, Musey, Marba *fēt*, cf. Gizey *fégéd* (internal *-k-* pl.) ‘tailler au couteau’ [LexC].

Deriv. in *d-*: C 7 Mofu *-fātád-* ‘tailler en pointe, couper (les épis de

mil)', Mada *éftèd* 'couper les épis (sans laisser de tige)', Mol *fàtaday* 'sharpen to a point' [FsM].

**a.\*fV[t]- 'to harvest':** W 3 Tng *pete* 'to cut corn, harvest', Dera *peer* 'to cut' [JgIb]; C 10 **\*fe[t]-:** Azum *feta* 'to harvest (grain) (cutting off the ears one by one of the high grains, using a knife)', Gizey *féd*, Masa *fé?*, Ham, Musey, Lew, Marba *fét* 'récolter' [LexC], Musey *fedta* 'récolter le mil' [ShyM].

Presumably, the *-t- ~ -d-* correspondence within the masa gr. points to PCh *\*-t-*.

**331. \*fV[t]- / \*fw[t]- (or \*w-fV[t]-) 'to lose, to be lost':** W 7 DB *fof*, Bok *fôt* 'to lose smth' [RC]; C 10 Masa, Marba *vit*, Peve *fid*, Hedè *vid* 'to lose, disappear' [Shy], Musey *vidta* 'perdre, oublier, tromper' [ShyM], Dzpw *vidi* '(se) perdre', Dari *fid* '(se) perdre, s'égarer', Musey, Lew, Marba *vît* 'égarer (s)', se perdre' [LexC], Azum *vita* 'to be ignorant; to lose' (*vi-* < *\*-fi-*).

Deriv. C 6 Buwal *fiték* 'to be lost'.

**332. \*fVh- 'sorghum':** W 7 DB, Bok *fô?* 'Acca-Hirse' [JgR]; C 8 Makari *fio* 'sorghum', Afd *phioh* 'Hirse' [Sol: 132], Log *vio* 'Guinea corn' [AIL], Bud *fieù* 'Negerhirse, Korn' [LkBd].

Cf. C 10 Masa *fū* 'boule de mil, nourriture' [CC], Masa, Gizey, Ham, Musey *fū*, Lew, Marba *ʔàvù* 'boule de mil' [LexC].

**333. \*fVg- (or \*fVγ-) 'to fall':** W 6 Duw *fəgo*, GBade *fàgu*, WBade *àvgu* 'to fall', Ngz *vəgú* 'to fall down'; C 4 Sharwa *fūg*, Jimj *fuič*, Tsuvan *fužε* 'to fall' [BryJ]. The next isogloss is cognate. The semantic link between 'to fall' and 'to throw' is quite common.

**\*[f]Vγ- (or \*nfγ) 'to throw':** W 4 Wrj *vay-*, Kar *voo* 'to throw' [SkNB]; C 4 Gude *vugə-də* (directional suff.) 'to throw far away'.

//Sem Mhr *nfġ* 'to throw' [JM: 283].

**334. \*fVg/γ- 'to begin, be new':** W 3 Tng *pəgyə* 'new, young'; C 5 Glv [*fVg-*] *fūyàrža fugà* [Kr], *fəgàrəšá* (with infixes *-r-* and *-sha-*), i.e. [*fVg-*] 'to begin' [Rp]; 8 Kus *faga* '(be) first' [AlK]; E 4 Sok *ófogoo* 'anfangen' [Luk]. Cf. C 3 Bana *fūyù* 'beginning of the dry season'.

//ECush Som *foog* 'morning, tomorrow' [LIS].

**335. \*fak-** ‘to shelter, close’ (sg.): C 7 Ould *-fākó* ‘fermer en couvrant d’en haut’ (sg.), cf. *-pāko* (pl.) ‘couvrir’.

Derived noun; W 2 Grk *vu-vok* (< *fu-vok* < *fu-fok*) ‘roof’ [Fp].

Deriv.: W 5 Mng *fuki-ne* ‘to hide smth’ [Cs].

a. **\*pVk-** ‘to cover’ (pl. of *\*fak-*, attested in the mofu languages only. Alternatively forms in *p-* may follow N<sub>2</sub>446 **\*pVk-** ‘to shelter’): Baka *paká* ‘couvrir’ [BAS], Ould *pākó* (pl. of *fako*) ‘couvrir’.

//Cf. Sem Mhr *fkw* ‘to cover’ [JM: 92]. Note that Hs *k* follows Ch and AA *\*k*. Thus, Hausa *fākà* ‘to shelter’, *fākèè* ‘a shelter’ (see N<sub>2</sub>446) can not be cognate with Mehri *fkw*. For **\*fak-** sg. ~ **\*pak-** pl. see also N<sub>2</sub> 337 ‘to put’.

Cf. [TN N<sub>2</sub>544 **\*PQ/K** ‘to conceal, hide’].

**336. \*fVwVk-/\*fVfVk-** ‘to blow, whistle, breathe’<sup>40</sup>: W 1 Hs *fúkú-fúkù* ‘puffing up or swelling of anything’; 2 Goem *fúk* ‘to blow a flute, inflate smth’ [Hlw], Mghv *fúk* ‘to blow air with bellows; to be very angry’ [BIM]; 3 Tng *puke* pl. ‘to winnow (in calabash)’; 4 Siri *fikū* ‘to blow’ [JgIb], Paa *faki* ‘to blow with mouth’ [MS]; 7 Fyer *vivik* (< *fivik* < *fifik*), Sha *fúk* ‘to blow’ [JgIb]; C 5 Pod *fik<sup>w</sup>à* ‘siffler’, Mlg *fik<sup>w</sup>a* ‘a whistle’; 6 Buwal *fefæk<sup>w</sup>*, Mbedam *fefek* ‘siffler’ [NdP]; 7 Mofu *-fáfák<sup>w</sup>* ‘siffler (avec la bouche)’, Mafa *fuk<sup>w</sup>-*, Muy *éfik<sup>w</sup>ēy*, Zlg *fēfek<sup>w</sup>é*, Merey *fəfúk*, Baka *fik<sup>w</sup>éy* [BAS], Mol *fokoy* [FsM], ‘siffler’, Mada *fōfōeyok<sup>w</sup>* ‘siffler avec les lèvres’, Chuv *méfək<sup>w</sup>oèy* ‘siffler (homme)’; E 3 Tum *pàg púl*, Ndam *piga* ‘respirer’; 6 Mok *púùkè* ‘respirer’.

Cf. CCh *\*pik<sup>w</sup>* ‘whistle’ [GvP].

Derived nouns: 1. W *\*fu(k)fuk-* ‘lungs’: 2 Ngas *fúkfúk* [JgN]; 5 Zaar *vùvùk* [CrZ]; 6 Duw, WBade *fəkfək*. Cf. W 1 Hs *fúkà*, *húkà* ‘bronchitis, asthma’ > *fúkà-čee* ‘suffer from asthma; to become weak, dried up, exhausted’.

2. W 2 Ngas *fuk* ‘bellows’ [Fl, JgN]; C 8 Kus *vak<sup>w</sup>ika* ‘bellows’ [AlK].

a. For W 1 Hs ‘puffing, swelling’ (see above) cf. C 2 Bura *fika* ‘to swell up’ [BIB], W 3 Kupto *fúkkùl* ‘goitre’; C 10 Musey *fefekka* ‘le gésier’ [ShyM].

For a similar linking of ‘to blow’ & ‘to swell’ see also N<sub>2</sub>290 **\*fV<sup>w</sup>/w/y-** ‘to blow’.

//SCush rift *\*fukuuku* ‘to blow (wind)’ [Kies].

[JgIb *pk* ‘to blow’].

<sup>40</sup> Possibly, pl. in *-k-*, cf. N<sub>2</sub>290 **\*fV<sup>w</sup>/w/y-** ‘to blow, dry’.

**337. C 7 \*fak- ‘to put’** (sg. obj.): Muy *áfka-d* ‘to put down (one obj.)’, Ould *-fākō* (sg.) ‘poser sur qqch’. Cf. 4 Bch *fukō* ‘to fall’ [Sk].

a. **\*pak- ‘to put’** (pl.): W 2 Ngas *pak* ‘to put one thing on top of another’ [F1]; C 7 Ould *pākō* pl. ‘poser, mettre pl. choses sur qqch d’horizontal’.

**338. W 7 \*fuk- ‘to want, love’**: DB *fuk* ‘to want, love’, Monguna *fūk* ‘to want’ [RC].

Cf. W 2 Mush *nvúkún* (*nv-* < *\*nf-*) ‘to be determined, eager’ [JgO]; C 7 Ould *-fākōmá* ‘vouloir, aimer’.

//Sem Akk *puqu* ‘to heed, be attentive to, concerned, anxious’ OB on [CAD p: 512], Geez *nfq* ‘care for, long for’, Tna *nafäqä* ‘yearn, long for’, Amh, Gur *naffäqä-* [LsG: 389], Akk *nuppuqu* ‘to pay attention’ OAkk [CAD n2: 342].

**339. E \*fVk- ‘to release’**: E 1 Kera *fógé* ‘losmachen, détacher’<sup>41</sup>; 5a EDng *piké* ‘détacher (les bêtes), lâcher, relâcher, relaxer’, WDng *pikè* ‘relâcher, lâcher’.

//Sem Arab *fkk* (u) ‘dégager, défaire; séparer, (re)lâcher’ [BK II: 623].

**340. \*fVk- ‘dry season’**: W 3 Krf *fókkí* ‘warm (weather)’ [Stl]; C 2 Bura *faku* [B1B], Ngwahi *fwohu* [Kr], K1b *fwàkù* ‘dry season’ [MuK]; 5 Hitk *fàakà* ‘heisser Jahreszeit’. Cf. W 3 Kupto *fàkkàk* ‘shining, beaming’.

//Common Berb *fk* ‘soleil’: Shilh, Ntifa, Sen *tafukt* ‘soleil’, Qab *tafukt* ‘soleil, chaleur’, etc. [NZ: 547f].

**341. C 10 \*fVyVk- ‘long, tall’**: Masa *fyòk* ‘longueur’, Musey *fekka* ‘longeur, hauteur’, Gizey *fiyók*, Ham *féék*, Lew *fiyéék*, Marba *fiyák* ‘haut, long’ [LexC], Azum *fiaka* ‘long, tall’ Cf. W 1 Hs *fiifìkò* ‘superiority’.

//ECush dull Harso, Dob *faak-* ‘grösser sein, hoch sein’ [AMS].

**342. C \*(?a)-fVk(w)- ‘face, front’**: 5 Wnd *áfkè*, *wofke* [WfN], Mlg *fáke* ‘Gesicht’, Glv *vúk<sup>w</sup>a* ‘face’; C 8 Zina *má fká* ‘before’, Kus *fago* ‘in front of, front of’ [AlK]; 10 Musey *fok* [ShyM], Masa *vòk* ‘le front,

---

<sup>41</sup> For an alternative cognate for Kera, namely – Eg *flì* ‘ablösen, loslassen/release’ see [TN №474].

devant, avant' [CC], Gizey, Masa, Ham *vòk*, Lew, Marba *àvòk*, Musey *fòk* 'devant' [LexC], Dari *vūk*, Dzpw *vùk* 'front' (*ʔafVk-* > *avVk-* > *vVk-*). Cf. W 1 Hs *fùskà* (if < *fuk-sa*, metath.) 'face, embroidery on front of gown'. Note: "Kan *fàska* ? < > Hs" [SkH: 71].

**343. \*fV[k]- 'to dig':** W 2 Ngas *fok* 'to dig' [Or], *fòk* 'to dig a hole' [JgN]; E 4 Saba *ʔapke* 'to burry'.

Derived noun: *\*ʔafVk-* 'hole': W 6 Ngz *vàk*, WBade *vàkən* 'hole'; C 5 Pod *vge*, Wnd *əvge* 'trou' [Mo: 19], Wnd *évege* 'hole' [FW], Glv *áfǵà* 'ditch, hole, hollow, opening'; C 10 Dari *fōk* 'trou laissé par qqch'. Hardly < AA *\*bk* 'hole' as in [TN №91].

//Sem Arab *faqʔa*, *faqiy-* 'creux dans un sol dur' [BK II: 617], dull Dob *puqe*, Goll *paqe* 'Fenster, Loch in der Wand' [AMS].

Note C 4 Gude *fūkə-nə* 'vagina', possibly < Sem Arab *fūq-* 'ouverture de la bouche; vagin' [BK II: 648].

**344. \*fV[k]- > fy/wVk- 'to have bad luck':** W 2 Mghv *fyak* 'to feel annoyed, pained' [BlM]; C 10 Dari, Dzpw *fòk* 'avoir de la malchance'

//Sem Akk *pīqu* 'distress, difficulty' SB [CAD p: 394], Arab *fuwwāq-* (*fʔq*) 'douleur, peine' [BK II: 529]. Cf. ECush dull Goll *pok-* 'Schmerzen haben'.

**345. W \*fVḵ- 'to sharpen, sharp point':** W 1 Hs *fīkà* 'to sharpen to a point'

Derived nouns: W 1 Hs *fīkà* 'fang of an animal, canine tooth', *fīikee* 'any sharpened point'; 2 Goem *fuak* 'kind of spear' (apud [TAS: 113]); 3 Kupto *fīk* 'arrow'.

//Sem Arab *fqʕ* 'percer (un clou sur le corps)' [BK II: 621]. ECush Som *fīiqay* 'to sharpen', *fīiq-a* 'point, tip' [LIS].

For Hs-Sem see [TN №366]. Cf. Eg *fq* 'vom Löwen, dessen Krallen and Zähne das Wild 'zerreißen'/about lions, whose claws and teeth tear the prey' [EDE II: 584f].

**346. \*fVḵ- 'hard earth, farm':** W 1 Hs *fākò* 'hard, barren ground'; 3 Kupto *fīifāk* 'land or place where there are garvels', cf. Kupto *fūhà*, *fūkà* 'sand'; C 2 Chb *foku* 'Farm, Feld' [HfC], Bura *faku* 'farm' [BIB]; 5 Pod *fika* 'champ de mil de la saison sèche'.

//Sem Arab *fāq-* 'desert' [BK II: 648].

**347. \*fVs- ‘to boil, burn’:** W 1 Hs *tà-fasà* ‘to boil’; 7 Fyer *fwaš* ‘verbrennen’, DB *fāš* ‘rösten’, Sha *fos* ‘kochen’, Bok *fos* ‘kochen’ (intr.) [JgR], *fos ya*, Monguna *fos* ‘to boil (up)’ [RC]; C 5 Hdi *fəsay* ‘to grill’.

//Eg *fs* alt, später *pfs, ps* ‘kochen’ [EG I: 578]. For alternative cognates: Eg, WCh, CCh *\*pc*, etc., see Cf. EDE II: 582-584].

**348. \*fVs- ‘to rob; robbery’:** W 1 Hs *fāši* ‘highway robbery’; C 3 FK *fwásà* ‘to rob’; 4 Gude *fwásà* ‘highway robbery, mugging’.

//SCush rift *\*fiis* ‘to steal’: Irq, Gor, Alg, Bur *fiis* [Kies], cf. agaw Hamta *fis-*, Kem *fäš-* ‘to take away’ [ApAg]. Cf. [TN №469].

**349. \*fVs- ‘to sprinkle, make wet’:** W 1 Hs *féesà* ‘to spurt out water from the mouth on to an article’; 7 DB *fes* ‘(to be) wet’, Karfa *fes* ‘to make wet’ [RC]; C 4 Gude *fəši, fisə* ‘to spray water out from mouth’, Bch *fiisə* ‘to spew, sprinkle’ [Nm]. Cf. W 3 Bol *fuuš-* ‘to wash (clothes)’ [LkB].

Possibly, a metath. variant of Ch *\*sVf-* ‘to drizzle, flow’, see [CLD III №573].

**350. \*fVfVs-** (compensatory redupl. < *\*HVfVs-*) ‘to scrape, erase’:  
W 2 Ngas *fiis* ‘to scrape off the hair on a skin for tanning, be bald, be free of hair’ [F1], *fis* ‘to remove hair, esp. from animal skin’ [JgN]; C 7 Mofu *-vávəs-* ‘effacer, faire disparaître des traces’, Mbuko *vevas* ‘effacer’ (< *fVvVs-* < *fVfVs-*); 9 Mulwi *fifisi*, Mnj *fifisi* ‘effacer’. Cf. 5 Pod *vusa* ‘to erase, cross out; essuyer, effacer’.

//Sem Arab *ʾfs* ‘frotter (une peau pour la préparer)’ [BK II: 299], ECush dull Dob *fas-* ‘kratzen’ [AMS], Om Wolt *foossh-* ‘to scratch’ [LmW: 356].

**351. \*n-fVs- ‘to blow, breathe, operate bellows’:** W 7 DB *nafos*, Bok *lafòs*, Monguna *mafòs*, Sha *lufwos*, Mundat *lafòs* ‘to breathe’ [RC]; C *vVs-* < *nfVs-*: 4 Gude *vasə* ‘to smoke animal out of hole, operate bellows’; 5 Vemgo *vusu* ‘to blow’ [HmG]; 7a Skn *vus-ma* ‘to blow at smth’; 8 Makari *fasi* ‘to work the bellows, fan, air, breath’, Log *vasi-wun* ‘to fan’, Kus *se vas* ‘respirer’, cf. *vaska* ‘to light fire’ (if = ‘to blow up fire’) [Al], cf. Log *fifássə* (compensatory redupl.) ‘to blow’ [JgIb]. Cf. CCh *\*vats* ‘to blow’ [GrR].

Derived noun: W 6 Monguna *mafós* ‘life’ [RC]; C 8 Log *viši* ‘breath, soul, spirit’, Kus *vas* ‘soul, spirit (of living person), breath’ [AIK].

//Sem *\*nps* ‘to blow’ > ‘soul, breath, wind’: Akk *napāšu* ‘blasen, (auf)atmen, relax’/‘to breathe freely’ OA, OB on [AHw: 736, CAD p: 288], Geez *nafsa* ‘to blow (wind, spirit)’, *nafs* ‘soul, spirit, breath’, Sab *nfs<sub>1</sub>* ‘soul’, Hbr *npš* ‘to take a breath’, Aram, Ug *npš* ‘soul, person’, Ethioseme *nfs* ‘to blow’ > ‘wind, soul’ [LsG: 389], Ug, Phn, Pun, OArām *npš* ‘throat; breath, soul’ [DUL: 627], Arab *nfs* V ‘respirer’, *nafas-* ‘respiration; souffle’, *nafs-* ‘ame, principe vital’ [BK II: 1310]. Cf. [SED: I 389]. For a metath. see *\*sVf-* ‘to breathe’ [CLD IV №65].

**352. *\*fuz-* ‘to pierce’:** W 2 Kofyar *fūs* ‘to pierce’ (apud [TAS: 292]); C 7 Mafa *fuzā’a* ‘percé (porte, habit)’; cf. E 6 Mok *’āppizá* ‘percer (avec une lance); tatouer’ (an arabism?).

//Sem Arab *hfz* (i) ‘percer avec une lance’ [BK II: 458].

For Mafa-Mok < AA *\*p-ʒ* see [TN №346].

**353. *\*fiç-* ‘to cut, slice’:** W 1 Hs *fēets’aa* ‘to wound superficially’, *fēets’ee* ‘a short cut’; C 3 FK *vicà* ‘to cut’ (*\*fVc/č-* > *v-c/č-*); 7 Ould *fācāy* ‘tailler, couper un épi’, Mada *éfčé* ‘couper, trancher’.

Deriv. in *-d-*: C 7 Merey *fācad* ‘tailler’.

**354. *\*fVč-* ‘to blow, to smoke’:** W 1 Hs *fāacè* ‘to blow the nose’; 4 Diri *fāčù*, Tsagu *fées-* ‘to blow’ [SkNB]; C 7 Mada *ávàcà* ‘souffler’, Chuv *mévèčèy* ‘enfumer’, Mofu *-fāč-*, *-vāč-* ‘enfumer, activer (le feu)’, cf. Muy *ávàcāy* ‘to treat, cure by blowing’ (*\*fVč-* > *v-c/č-*, or < *\*nfč-*). Derived noun: C 6 Daba *vīč* ‘soufflets de la forge qui servent pour active le feu’.

//Sem Arab *nft* (i, u) ‘souffler sur qqch’ [BK II: 1304].

[HSED №789].

**355. *\*fal(l)-* ‘to slaughter, cut’:** W 1 Hs *fállè* ‘to behead a criminal’; C 10 Dzpw *fāl* ‘couper en morceaux, égorger’, Peve *fol* ‘to butcher’ [Vn], Mesme *fāl* ‘to cut’ [Kr], *fāl* ‘cuts’ [JgZ]; E 2 Lele *pāl* ‘tailler légèrement’; 3 Tum *pāl* ‘tailler, sculpter’.

Derived noun: C 7 Mada *me-fefel* ‘cicatrice’.

//Sem Arab *fl<sup>s</sup>* (a) ‘fendre, couper’ [BK II: 631].

a. *\*fil-* ‘to cut (in pieces)’: W 2 (deriv.) Mghv *filet* ‘to cut a small

piece' [BLM]; C 7 Muy *éfil* 'cut round smth'; E 5a EDng *pilé* 'dépecer'.

//Sem Arab *fly* (i) 'frapper avec un sabre' [BK II: 635], Aram *pālā* (*ply*) 'split, cut open' [LsG: 161] Malt dial. *fellel* 'to slice, to cut into slices' [Bel 2: 275], Shilh *flu*, Siwa *fli* 'fendre', Ahag *efleh* 'se, être fendre', *efli* 'fendre' [NZ: 562, 567, 575].

[AA 1 №38 'to cut, separate', cf. \**pVl-* 'to separate' ~ Sem Arab *faliya* 'be cut off'].

**356. \**fii/l-* 'to pierce, hollow out':** W 2 Ngas *fyalan* (< *fila-ŋ* pl. in *-n*?) 'to hollow out, bore a hole' [JgN]; C 7 Mada *éfle* 'évider, percer', E 5a EDng *pilē* 'échancrer, (entr)ouvrir, trouer, béer, bâiller'. Note confusion of semantics 'to open (slightly)' & 'to hole' in EDng.

Cf. C 8 Makari *falal* 'spear sp.' [AIM].

//ECush dull Harso, Dob *foola* 'scharf', Goll *fool-* 'scharf sein' [AMS].

Derived noun: \****ful-* 'hole'**: W 2 Goem *ful-dyas* 'anus' ('hole' + 'excrements') [Hlw]; C 2 Bura *fula-m* 'throat' (*-m-* is a body-part marker) [BIB]; E 3 E Tum *pūūl* 'trou'.

Derived verb in *-k-*: C 7 Mofu *-fálkw-* 'passer à travers un orifice, entrer, pénétrer'.

Derived noun: C 7 Mbuko *felek* 'trou à côté de l'oreille', Muy *fālāk<sup>w</sup>ō* 'any hole in a wall of a house'; 8 Log *flaga* 'cave, grotte' [ALL]; E 5a WDng *páliigò* 'trou de terrier de souris, tunnel latéral'.

//Sem cf. Geez *falfala* 'gush out, break forth', etc., (K\* 'to shell, pierce'), Tgr *fālfälä* 'sprout forth, break through', Tna *fālfälä* 'break, make a hole'<sup>42</sup> [LsG: 158], Berb Qab *flu* 'trouer, perforer', *tifli* 'petit trou', Mzab *fel* 'percer' [NZ: 561f], ECush Oromo *fulla'a* 'break through, pierce through', *fulla'a* 'be broken' [Grg], Burji *ful-áa* 'hole', Oromo *fullaw* 'be perforated' [SsB], Konso *fula* 'Loch, Tur', Ong *fullē* 'hole, passage, nostril' [FIO], SOm Hamar *pula* 'hole' [BnA].

**357. \**fil-* 'to open (eyes)'**: W 3 Kupto *filléy* 'to open (esp. eyes in order to frighten so)', cf. 2 Mghv *fālip fālip* idf. 'halboffen (von Augen)' [JgS]; E 5a WDng *pilē*, Bid *pil* 'ouvrir', EDng *pilē* 'ouvrir, bâiller, trouer'. Cf. the previous entry.

---

<sup>42</sup> For 'to break' in Sem cf. CCh \**ful-* 'to break': 1 Hona *fūlən*, Boka *filə-dī*; 4 Nzn *fila-adi* 'to break in pieces' [Kr]; 4 Bch *fūlò* 'to break pot' [JgIb].

//Berb Ahag *felelli* ‘être fixe et grand ouvert (oeil)’ [NZ: 576]. For Ahag, ECh see [TN №442].

**358. \*fīl- ‘to peel, skin’:** W 2 Ngas *fil*, *fhil* ‘to peel, skin’, *fwál-p* (pl.) ‘to strip, peel’ [Fl, JgN], Mghw *fēel* ‘häuten’ [JgS], ‘to peel’ [BIM], Mush *feel* ‘to peel cocoyam with hand’ (apud [TAS:105]); E Mawa *peliyaŋ* ‘dépouiller’; 5a Bid *pil* ‘écorcher un animal, dépouiller’, EDng *pilé* ‘dépecer, dépouiller, enlever la peau d’un animal’; 5a Brg *fili* ‘écorcher’.

Derived noun: W 2 Ngas *fīl* ‘the slough or cast skin of a snake’ [Fl], *ma-fel-p* ‘fish scale’ [JgN], Goem *tə-fala-p* ‘bark of a tree’ [Hlw], Mpn *fālī-p* (-p pl.) ‘husk, shell’; 5 Zaar *fwáli* ‘slaughtered-off skin of snake or lizard; bran’ [CrZ]. Cf. W 4 Miya *pèler* ‘skin, hide’ (possibly < *feler*, in [Sch] *f-l* structures are not attested).

Deriv. in *-k-*: C 7 Ould *-fālāk* ‘décortiquer’; 9 Mnj *fulki* ‘décortiquer (arachides), éplucher à la main, égrainer à la main’, Mulwi *fūlki* ‘éplucher, décortiquer’.

Deriv. in *-t-*: C 10 Ham *félét*, cf. Gizey *léfét* (metath.) [LexC], Musey *fūlot* ‘décortiquer’ [ShyM].

//SCush Bur *fala*, Asa *fulo* ‘hide’ [Eh: 150], SCush Irw, Gor *fala* ‘hide, prepared skin’, Alg, Bur *fala* ‘skin’ [Kies], Afar *falee* ‘Ziegenhaut’ [RA], Sem Arab *wfl* ‘peler qqch en étant l’écorce’ [BK II: 1578], cf. Berb *fl* ‘tanner, assouplir’: Shawiya *afel* ‘tanner’ Ahag, Wlmd, Ayr *afel* ‘être tanné’, etc., ACE *tifli* ‘écorce’ [NZ: 560f].

[AA 1 №68 \*fVl- ‘(to) skin, peel’: Arab, SCush, Ngas, Mghv; TN №№505, 507].

**359. \*fVl- ‘to boil’:** W 2 Goem *fyàl intr.* ‘boil or sparkle’ [Hlw], *fial* ‘hot’ [Fp], Grk *fwil* [BIY], Ngas *fil* [JgN], Chip *fiyèl*, Mghv *fil* ‘to boil’ [Kr]; 3 Krkr *filu* ‘to boil’ [GK], Kupto *fūlò* ‘to expand, to bloat, to reach a boiling point’, Dera *pūli* ‘to boil’ [NmK], Bol *fulo* ‘Kochen’, *ʔi fulo* ‘kochen, to boil’ [LkB], *pulu* ‘to boil, swell, foam, be angry’ [GAB] (cf. Tng *pule* ‘to be(come) annoyed, angry’, for the similar semantic shift see Geez); 5 Grt *fūlwi* ‘to boil’; E 4 Mawa *pə-pələ-ŋ* ‘bouillir, cuire’.

Derived noun: W 2 Ngas *tə-fālk* ‘foam, froth’ [JgN]; 3 Bol *pūlùm-pūlum* ‘foam, froth’ [GAB], Pero *pūlpūl*.

Derived verb: W 3 Bol *pūl-tu* ‘to ‘boil, cause to swell’ [GAB]. For Bol *pulu* ‘to swell’ cf. W 3 Tng *pildum* idf. ‘describes state of swelling’

and W 1 Hs *fūlū-fūlū* ‘the swelling of eyes; of seeds’.

//Sem Geez *falḥa* ‘bubble out, boil’ > ‘get angry’, Argobba *fällaha*, Tgr *fälhā*, Amh *fälla*, Harari *fālahā*, Gur *fāla* ‘boil’ [LsG: 159], ECush dull Gaw *fool-* ‘Wasser kochen’, *foolis-* (trans.) ‘kochen’, *foola* ‘warm’, Dob, Goll *fool-* ‘warm werden’ [AMS], Ong *foolisa* ‘boiled’ [FIO], Berb Shilh *fluflu* ‘bouillir’, Maroco dial. *flulel* ‘bouillonner’, Wlmd, Ayr *falfal* ‘bouillir, bouillonner (liquide)’ [NZ: 560].

**360. \*fVI(l)- ‘to mount (an animal)’:** W 4 cf. Miya *pāla* < *fāla* ‘to jump’ (forms of the *f-l* structure are not attested in [Sch]); C 2 WMrg *fil-de* ‘to mount’ [Kr], Bura *fil*, *fil-ta* ‘to ride, to mount’, *filhi* ‘to dismount’ [BIB], Klb *fēl-ti* ‘to mount’ [MuK], Chb *fil*, *fāl-tā* ‘besteigen’ [HfC]; 10 Musey *fulla* ‘monter, embarquer’ = ‘descendre’, Gizey *fil* ‘monter à cheval’, Gizey, Masa, Ham *fil*, Musey, Marba *fūl* ‘monter à velo’ [LexC], Azum *fula* ‘to mount an animal’.

//Berb Shilh *afila* ‘partie supérieure; le haut’, Ntifa, Zng *afella* ‘le haut, le dessus’, etc. [NZ: 557], HECush *\*ful-* ‘to climb, go up’ [Hds], PECush *\*fu(u)l-* ‘go out, up’: Som *fuul-* ‘mount’, Sid, Darasa, Kamb *ful-* ‘go out, mount’ [Ss], Som *fuul* ‘get on top of, climb, mount’ [LIS]. Cf. Eg *ḥy* (OK) ‘hochheben, tragen, raise high’ [EG I: 572], for other possible cognates see [EDE II: 555-557].

Cf. №377 *\*fVr-* ‘to spring, jump, fly’.

**361. \*fVI- ‘to blow (away)’:** W 4 Jmb *fal-* ‘to blow’ [SkNB]; 5 Grnt *fali* ‘to blow’ [Ja]; C 2 Bura *fiḥilā* ‘to whistle with the breath’, cf. *fiḥāla* (dissim.) ‘to blow out’ [BIB]; 8 Makari *fil* ‘to blow away’ [AlM]; 10 Azum *fela* ‘to be blown about’, Gizey *fūl* ‘souffler’ [LexC]; E 1 Kera *fūulī* ‘souffler’. For a root variant see №381 *\*fVr-* ‘to blow, winnow’ (note that both are attested in Bura).

For a possible deriv. cf. W *\*f(w)l-k* ‘lungs’: 2 Ngas *fwolok* [FI], Mghv *fālòk* [JgS], Mpn *flòk*, Goem *fālòk* [Hlw]; 7 DB *fōlōk*, Bok *fòlòk* [RC]. //HECush *\*fool-* ‘to breathe’: *\*foole* ‘breath’: Sid *foole* ‘breath’, Kamb *fooli* ‘soul’ [Hds]. Cf. [TN №567 *\*Pl*].

a. *\*fVI-* ‘wind’ > ‘ghost’: W 3 Bol *pēli* ‘wind’ (perhaps only in archaic language), *pe-mpeli* ‘wind, spirit, ghost’ [GAB], Krkr *filfilā*, *fūfilāa* ‘wind’ [GK], Kupto *filfil* ‘wind, air; spirit, devil’; 5a Hdi *fala-k* ‘wind’; 7 Mada *fla* ‘génie, esprit lié à un objet magique, souvent maléfique’; 10 Azum *flei-na* ‘idol, oracle’, Dzpw *fūr* ‘esprit’, Gizey

*fūl* ‘esprit’, Marba, Musey *ful-na*, Ham *fūl* ‘esprit-génie’, Masa, Lew *fūl* ‘génie de la brousse’ [LexC]; Cf. E 3 Tum *pūl* ‘air’.

**362. W \*ful- ‘to abuse’:** 2 \*ful-p (pl.): Grk *fluēp* ‘to abuse’ [Fp], Mghv *fulup* ‘to curse’ [JgS] ‘to abuse’ [BIM], Mpn *fālāp*, Mushere *fulup* ‘to abuse’ [JgO], Mush *fulup* [JgO], Goem *fālāp* ‘to insult smb’ [Hlw]; 3 Krkr *fūulu* [GK], Bol *full-* ‘abuse, curse’ [LkB], *pūllu* ‘to abuse’ [GAB].

Cf. W 2 Grk *flup-ni*, Mnt *ful-ni* to curse’ [Fp] (pl. in *-n?*).

//Cush Arb *fal-* ‘to curse’ [Hay], Rend *fal-* ‘curse’ [Ss: 18], Eg *fβw* [if = flw] (Pyr) ‘Bedrohung o. a.’ [EG I: 575].

Common origin of Ch and Sem \**fʔl* (as suggested in AA 1 №67) is hardly possible, in the view of a semantic gap. Note: Arab *fʔl* II stem ‘faire tirer à qqn un bon augure/to make favourable prophecy’ [BK II: 529], Sab *fʔl* ‘wish ill to smb’ [SD: 43], Hbr, Aram *plʔ* ‘make miraculous, miracle’ [KB: 759f].

**363. \*fūl- ‘(exhausted) field’:** W 2 Ngas *fūl* ‘soil exhausted from cultivation’ [Fl], *fūl* ‘farm land passes on from generation to generation; sterile land (exhausted from cultivation)’ [JgN]; 5 Guus *vul* ‘ground’, Zaar *vūlum* ‘field cultivated by the grand-father’ [CrG, CrZ]; 10 Azum *fula* ‘the plain where the people have their fields’, *fulâ* ‘the uninhabited plains’.

a. \**fūl-* ‘open space’: W 1 Hs *fūilli* ‘an open space, cleared spot’; 3 Krkr *fūlaa* ‘a place’ [GK]; C 7 Zlg *fāla* ‘region’.

Deriv. in *-k-*: W 6 Bade *fālak* ‘dry, barren area’; C 10 Gizey *fūlòk* ‘dust’ [LexC].

//Cf. Sem Arab *flḥ* ‘labourer la terre’ > *falaḥ-at-* ‘champ cultivé et ensemencé’ [BK II: 628].

**364. \*fVI- ‘diarrhea, excrements’:** C 6 Mbedam *mvàlà* ‘diarrhea’ [NdP]; 9 Mnj *flay* ‘crotte, excrements’, *flay zi mi* ‘diarrhée’, Msg *fūlai*, *filai*, pl. *fila-káy* ‘excrements’ [LkM], Mnj *flay* ‘merde’; 9a Gdr *pālwa* ‘excrements’ (irreg. *p-*) [FrG]; E 4 Barein (dial.) *pílló* ‘to have diarrhea’; 5 Mig *pálló* ‘déféquer’, *pàlli* pl. ‘fécales, selles’.

//ECush Som *fal-ti* ‘cattle dung’ [LIS].

**365. \*fVn- ‘to surpass, overtake’:** C 7 Mafa *fān-* ‘être supérieur à,

dépasser’, Mofu *-fən-* ‘dépasser, surpasser’; 8 Log *fīna-wun* ‘overtake; surpasser’, Kus *fra* ‘surpasser, dépasser; overtake’, Makari *fīra* ‘overtake’ [Al].

Derived noun: W 4 Wrj *fana-na* ‘pride, arrogance’ [BIS].

//Sem Arab *fn<sup>c</sup> (a)* ‘être riche, s’enrichir’ [BK II: 638].

The following isogloss may be cognate:

**a. \*fVn- ‘to increase’:** C 6 Daba *fòn* ‘élargir’; 10 Dzpw *fáy* ‘devenir, grandir, métamorphoser’; E 5a EDng *pènyiyē* ‘se multiplier, augmenter.’

**366. C \*(HV)fīn- > vin-, vīn-x-** (pl.?) ‘to vomit’: 3 Bana *vənàxwə*, FK *vənàhú*, Hya *fənu-gwə* [BIH]; 4 Gude *vaana*, Jimj *viúni*, Tsuwan *vənà’àn*, Sharwa *vánā* [BryJ], Bata *vəna* [Sk]; 5 Lmn *vunay<sup>w</sup>a*, Hdi *vənaaxinta*, Vemgo *venax<sup>w</sup>a*, Gvoko, Dghw *vraxa*, Gdf *vərxə*, Gava *vrxə*, Glv *vraga* [HmG], Glv *vəray* [Rp], Pod *vəra-ha*; 6 Buwal *vəna*, Daba *vənà*, Gavar *vəna*; 7 Dugwor *mé-vīnèhéy*, Mafa *vīnéh-*, Chuv *mévənèhéy*, Mbuko *véne*, Mol *vənahay* [FsM], Mada *ávnàh*; 8 Log *vinahi-wun* [AIL]; 9 Mbara *finé*; 10 Masa, Marba, Musey *vin*, Lame *vīnè’è* [Shy], Dzpw *vīnè’è*, Azum *vina*.

Derived noun: C 7a Skn *fine-di* ‘child's sickness (vomiting and "tightening of the belly")’.

Cf. CCh *\*vīnah* [GrR].

**367. \*fVn- ‘skin’:** E 4 Sok *fáná*, *páná*, *pháná* ‘Fell’ [Luk]. Note C 3 FK *fùn* ‘rhino’; 7a Skn *fən* ‘rhino (hide used for shields)’ [DS].

Denom. verb: **\*fīn- ‘to skin’:** W 2 Goem *fīn* ‘to peel off the skin of smth’ [Hlw]; C 10 Dzpw *finé’é*, Dari *fənè’* ‘muer, peler (pour la peau)’.

//Cf. PHEC *\*feenk-* ‘to shell’ [Hds].

For a root-variant cf. №358. **\*fil- ‘to peel, to skin’:**

**368. \*fV(HV)n- ‘foot, trace’:** W 2 Goem *vun* ‘footprint’ [Hlw]; C 7 Muy *fūṣwā* ‘trace of smth’; E 4 Sok *offen* < *fVHVn*) ‘Fuss, Bein’ [Luk].

//Sem Ug *p<sup>c</sup>n* ‘foot, (hind) hoof’ (Hbr, Phn, Pun *p<sup>c</sup>m* ‘foot’) [DUL: 650], HECush *\*faana* ‘track of an animal’ > Burji, Sid, Gede’o, cf. Sem Amh *fana* [Hds].

**369. \*fifin-** (compensatory redupl. < *HVfin-*) ‘stalk for brooms,

**fences**': W 4 Wrj *fifina* 'kind of grass, smth used for brooms' [BIS]; C 7 Mol *fefen* 'stalk' [FsO], Muy *fifin* 'millet stalk', Mada *ávvaŋ* (< *avVfVn-* < *afVfVn-*) 'tige de mil'; E 5a Mig *pìinú* 'paille pour les palissades'.

For a root variant see №522. **\*pan-** 'millet stalk (for plaiting)'.

**370. [\*w-f-n] > fwan-/vwan-/hwan-** 'rain': W 2 'rain': Grk *fien* [Fp], Ngas *fwan* [Fl], Goem *fwàan* [Hlw], Mghv *fwan* [BIM], Mpn *fwàn*, Msh *fwan* [JgO]; 4 Wrj *von* [BIS], 5 Dyarim *vwàn*, Guus *von*, [CrG], Zaar *vòn* [CrZ], Grnt *vwan*, Jimi *h<sup>w</sup>an* (< *fwan*), Tala *h<sup>w</sup>aan*, *faan* 'rain', Tala *ba-hawan* 'rainy season', *tərə-h<sup>w</sup>ano* 'rain-bow', Mng *fwán* 'cloud' [Cs], C 3 FK *vàn* 'rain'; 4 Gude *vəná* 'rain', *vyánə* 'rainy season', Jimj *vònán*, Tsuvan *vwóné*, Sharwa *vònə* 'rain' [BryJ]; 6 Buwal *van*, Daba *vàn*, Mina *ván* [MnGr], Mbedum *vàŋ* 'rain'; 7 Gis *voj* 'rain', *bil-voj* 'Gott', Mafa *vanay* 'nuage', Ould *āvər* Muy *āvər*, Baka *ávər* 'rain' [BAS], Mofu *vár* 'pluie, nuage', Mbuko *vévara* 'vent qui précède la pluie'; 9 Msg *(a)faŋ* [LkM], Mnj *faŋ* 'pluie'. Cf. CCh *\*vín* 'rain' [GrG].

**371. \*fVn-** 'black': W 7 Karfa *ufon*, Kul *má-fwòn* 'black', *fwanàn* 'dunkel' [RC, JgR]; E 5a WDng *pón-dà* 'noir', EDng *pùn-dà* 'sombre, noir, foncé (symbole de méchanceté)'. Cf. C 7 Ould *fēŋw* 'nuit'.

The structure of the next root is typical of derived nouns:

**a.\*afVn-** 'charcoal': W 3 Ngm *ùfna* [NEH]; 4 Paa *avuj* (cf. Kariya, Jmb *li-vin*) [SkNB]; 6 Ngz *áván*, Bade *avan* 'embers, charcoal', Duw *vàanyaaká* 'embers', *vàanyi* 'charcoal'; C 'charcoal': 2 Bura *vina* [BIB], Klb *vúni*, Hld, Mrg *vwunyi* [Kr]; 4 Chn *àvèni*, Gude *ivínyin* [Kr]; 5 Hdi *vwani*; 7 Chuv *vəŋ*, Mafa *váng*; 7a Skn *vin*; 8 Kus *uvun* [AlK]; 9 Msg *àŋvəŋ* [JgIb], Mnj *evəŋ*; 10 Peve *vōn* [Shy \*v-n], Masa *vəŋ*, Dari *vōn*, Dzpw *ávàn*.

Note C 8 Afd *phánphan* [Sol: 132], Makari *fonfon* [AlM] 'charcoal' (orig. 'black-black'??).

Cf. CLD V №242 **\*yVw-** 'fire' > **\*y<sup>w</sup>V-fVn-** (< **\*y<sup>w</sup>V-afVn-**) 'burning coal' (e.g., C 5a Lmn *yùvíní*, 'ashes, coal', etc.). An alternative etymology of Ch 'coal', namely, - Sem *\*faḥm-* 'coal'<sup>43</sup>, is attractive,

<sup>43</sup> Akk *pēntu* (*pēndu*, *pēmtu*) 'charcoal, embers', Arab *faḥm*, Hbr *pehām*, Soq *fḥam*, Ug, Phn *phm*, Geez *faḥm* 'coals' [LsG: 157]. Denom. verb: Arab *fḥm* 'être très noir, noir comme le charbon' [BK II: 550].

but not without a problem. There is no proof that \**fVHm-* would yield *vVn-* in Chadic languages.

**372. \**fun-*(H)- ‘hole, opening, gap’:** W 2 Ngas *fùŋ* ‘hole, opening, gap, window’ [JgN], Goem *fùŋ* ‘hole, opening’ [Hlw], Mghv *fùŋ* ‘hole, opening, tunnel, window’ [BIM], Mpn (*m*)*fùŋ* ‘hole (in a vertical surface)’, Chip *fùŋ* [Kr], Mush *fung* ‘hole’ [JgO]; 7 Fyer *fun* ‘hole’ [RC] (< W 2 ?); C 2 MrgC *fwàŋ* ‘hollow’; 3 FK *fáná-kù* ‘space on gum where teeth are missing’; 7 Muy *mà-fùŋ* ‘exit hole made by an animal’; 9 Mbara *vìŋ* ‘hole’.

//ECush \**fanh-* ‘opening’ > ‘gap, space, interval’: Som *fanah* - ‘gap between front incisors’, Rend *fahan* ‘gap in upper teeth ridge’, Saho, Afar *fan* ‘space, interval’ [Ss: 38].

**a. \**k-fun-*<sup>44</sup> > *vun-* ‘mouth’:** W 1 Hs *fàaŋgà* (compensatory redupl. < \**ka-funga*) ‘a hole, pot with a very wide mouth, toothless mouth’; 4 Cagu *vehe*, Diri *vəna*, Wrj *vina-həna*, Paa *vingi*, Siri *vəngi*, Mburku *vəŋhu*, Kar *vinahə*, Tsagu *vehe*, Miya *vun* [SkNB], Wrj *vina-* ‘mouth’, *vinah-* ‘in front of’ [BIS], Paa *vìngí* ‘mouth, side of’ [MS], C 3 Hya *fyin*, *vyin* [BIH]; 5 Pod *vəŋwa* ‘bouche, orifice; bord’; 10 Masa *vùn* ‘bouche, bec, ouverture, extrémité’ [CC], Dzp *vùn* ‘bec, bouche, entrée, gercule, bord de l’eau, bout, extrémité’, Dari *vūn* ‘bouche, ouverture, bout’, Peve *vūn*, Hedè *vùn* ‘mouth’ [Shy], Gizey, Ham, Lew, Marba, Musey *vùn* ‘bouche, porte’, Lew, Marba *ʔàvùn*, Gizey, Masa, Ham, Musey *vùn* ‘devant’ [LexC], Musey *vunna* ‘mouth, opening’ [ShyM], Azum *vuna* ‘mouth, opening, language, edge of hem’; E 5b MM, Kaj *fàn* ‘bouche’.

**373. \**far-* ‘to count, buy’:** W 7 Kul *fār* ‘zahlen’, Sha *ʔàfàh* ‘das Zahlen’ [JgR], Sha *fàrú*, Mundat *fâr* ‘to count’ [RC]; C 7 Mada *áffâr* ‘consentir un surplus à un acheteur’, Ould *fèrfè* ‘supplément, prime, cadeau en plus’; E 4 Sok *éferee* ‘kaufen’, *éfergádi* ‘verkaufen’, *éfergo* ‘tauschen’ [Luk], Saba *ʔepəre* ‘buy’ [DMT].

**374. \**far-* to be ill, exhausted’:** W 1 Hs *fára* ‘evidence of serious anaemia from whatever cause’, *faaràa-čee* ‘to become anaemic’; 3 Kupti *fòorò* (< *fwr*) ‘to become tired, exhausted’; 6 Ngz *fàrú* ‘to be sick’, *fàrá* ‘disease’, WBade *fàru* ‘to suffer from an illness’; E 5a Mig

---

<sup>44</sup> For the same pref. see W 5 Tala *ka-bi*; E 2 Nch *kwo-bə*, Lele *ku-b* ‘mouth’ in **№18**.  
155

*parâyò* ‘être malade’, WDng *pàriyà* ‘fièvre’, EDng *pàriyà* ‘le paludisme, malaria’.

Derived nouns: W 2 Ngas *farum* ‘fever’ [Or], *farm*, *fwarm* ‘cold in the head’ [Fl]; 6 WBade *fàráán* ‘smallpox’.

//Berb Ahag *afri*, Wlmd, Ayr *efrey* ‘ressentir; être légèrement malade, souffrir’ [NZ: 649].

Cf. [TN №554 \*Pr (\*p/\*b) ‘sickness’].

**375. \*fur-** ‘to descend, fall’: W 4 Siri *furu*, Cagu *fur* ‘to descend, unload’ [SkNB]; 7 Bok, DB, Kul *fur*, Fyer *fuḥ* ‘fallen’ [JgR], Monguna, Mundat *fūr*, Sha *fuú*, Karfa *fuur*, Mangar *fuy* ‘to fall’ [RC]; C 7 Mofu *-fār-* ‘lâcher involontairement, laisser tomber’. Cf. W 2 Ngas *fūr* ‘to throw on ground’ [JgN].

Deriv.: E 5b Mubi *fàaràdè* ‘to fall’ [JgIb].

//Sem Arab *fīr* (a) 1. ‘monter sur une hauteur’, 2. Contr. ‘descendre d’une hauteur’ [BK II: 578].

Cf. Eg *\*frfr* or *\*brbr* ‘to fall down’ with all possible cognates in [EDE II: 578f].

**376. \*fVr-** ‘to scrape, itch’: W 1 Hs *féeriyáa* (East Hs) ‘scraping (esp. the surface of the ground)’, 2 Ngas *fūr* ‘scrape (calabash of porridge, with the fingers); to get grains out of the late guinea corn’ [Fl, JgN]; 3 Bol *pèeru* ‘scrape out inside of hollow obj.’ (cf. *pèereyà* ‘a v-shaped cut on a lip of a decorated calabash’) [GAB]; C 2 Bura *firwa* ‘to resharpen a pointed instrument’ [BIB]; 6 Baka *far* ‘frotter, gratter’ [YB], Mbedam *fəfər* ‘gratter’ [NdM]; 7 Mol *far* ‘to itch, scratch’ [FsM], Muy *áfār* ‘to scratch, cause to itch’, Mafa (*fa*)*fər-* ‘se gratter’, Chuv *máfrèy* ‘frotter, gratter’, *méfəfərèy* ‘se gratter’, Mada *óffor* ‘démanger, to itch’, *ófforvà*, *fròh fròh* ‘se gratter’, Mofu *-fáfər-* ‘se gratter, frotter’, Merey *fəfar* ‘gratter’; E 5a Mig *pòrrò* ‘griffer’ > *pùrrùn* ‘ongle, griff’. Note E 4 Sok *firiḡ-firiḡ* ‘schreiben’ [Luk].

Deriv. in *-t-*: W 1 Hs *fārçè*, *fártà* ‘to scrape up soil’, *fārçì* ‘scraping the ground (eg. animal before defecating)’.

Deriv. in *-k/-g-*: C 10 Gizey, Masa, Lew, Marba *vìyòk*, Ham *vèèk*, Musey *vèrèk* ‘se gratter’ [LexC], Azum *vioka* ‘to scratch; scabies’; E 1 Kera *fèrgé* ‘jucken, démanger’.

//Sem Amh *farä* ‘to scratch, carve (wood)’ (also ‘to husk, to shell’), Berb Ntifa *ta-fura* ‘eczéma’, Wlmd, Ahag *ta-fuure* ‘maladie de peau’,

Snus *tfuri* ‘dartre’, etc. [NZ: 600]. Cf. SCush rift Irq *fura* ‘toothbrush’ [MQK], ECush Had *fur-š-* (caus.) ‘to rub off’ [Hds].

**377. \*fVr- ‘to spring, jump, fly’:** C 2 Bura *fila* ‘to jump, fly’, *filwa* ‘to jump and land in the same spot as did the previous jumper’ [BIB], Klb *fàlà* ‘to jump’ [MuK], Chb *fàlá* ‘fliegen’ [HfC]; C 3 FK *vàllá* ‘to jump’; 5a Hdi *valay* ‘to spring up’; 6 Mina *fír* ‘to fly’ [FrJ]; 7 Ould *fār* idf. ‘sauter’; 8 Bud *fer* ‘springen, tanzen, fliegen, to jump, danse, fly’ [LkBd], Kus *vil*, Makari *fīl*, Log *vil-wun* ‘to fly’ [Al].

Deriv.: \***fīr-** ‘top, up’: W 3 Krkr *fūiri* ‘peak, top’ [GK], Dera *póro* ‘up, upwards’ [NmK]; C 7 Mada *ávlà* ‘en haut, au-dessus’, 2 Lele *pīrīw* ‘en haut’.

Derived noun: C \***fVr-** ‘flight’: 7 Mofu *várr* ‘envol (d’oiseaux)’; 8 Kus *vilan* ‘vol, volée (d’oiseaux); flock (of birds)’, Makari *fale* ‘flight’ [Al].

Derived noun: \***fVr-** ‘sky, God’: W 3 Dera *púro* ‘sky’ [NmK]; C 10 Dari *fārè* ‘haut, ciel’ > *Yifāre* ‘Dieu’, Peve *fray* ‘sky’ [Vn], Mesme *afi?* (< \**afir#*) ‘sky’ [Kr]. Cf. 7a Skn *ma-far* ‘rainbow’.

//Cush Saho *fooro* n. ‘rise, upwards slope’ [Vr], Afar *fār* ‘hinaufsteigen’ [RA]; Om Wolt *fall-*, Dawro *fal-*, Gamu *per-edd’-*, Dac’e *fir-add’-*, Yemsa *ful-* ‘to fly’ (\*-rr- > \*-ll- > -l-) [LmW: 353]. Berb Ahag *e-feri* ‘aiguille rocheuse; pointed peak of a rock’ [NZ: 608], Maroco dial. *afurar* ‘endroit surlélevé d’un champ’, also ‘crème (de lait)’: Rift *tafrirt*, etc. [NZ: 600], Nef *far* ‘voler’ [NZ: 599] [AA 1 №66 \**fVr* ‘go up’ (only ECh)].

**378. \*fVwVr- ‘to smear’:** W 2 Goem *fwaar* ‘to smear, annoint’ (apud [TAS: 115]) [Hlw]; C 3 Bana *vəṛə* (*v-* < *fw-*) ‘oindre’; 10 Musey *fuura* ‘oindre d’huile’ [ShyM]; E 5a Mig *póoró* ‘enduire, oindre’.

Deriv. C 10 Azum *fīr-dā* ‘to wipe the nose’.

Derived noun: C 8 Makari *mfrac’i* ‘coating, enduit’.

//Cf. Om Shin *fīr-* ‘(ab) wischen’ [LmSh].

Common origin with №376. \***fVr-** ‘to scrape, itch’ can not be excluded.

**379. a. \*fVr- ‘to dig (out)’:** C 6 Daba *fār*; 7 Gavar *far* ‘déterrer’.

//ECush Som *farfaray* ‘dig (small holes)’ [LIS].

For a deriv. cf. W 1 Hs *fārám* ‘gaping (of hole)’.

Derived verb: E 1 Kera *fārgi* ‘creuser’// Cush Bed *ferik-* ‘graben einen

Brunnen; ein Grab' [RBd]

**b. C** \**vur-k-* 'to dig (out)': 9 Mlw *vùrgí*, Mbara *vùrók* 'to dig out', Mnj *vurgi* 'ouvrir, creuser, arracher (tubercule)'; 10 Giz, Masa *vùròk* 'fouir, creuser, bêcher', Musey *vèk*, *vèrèk* 'bêcher, creuser' [LexC], Musey *vekka* 'gratter, creuser' [ShyM].

CCh forms in the second set should be analyzed as derivatives in *-k-* from [\**-vur-* < \**H-fVr-*] 'to dig'. For a derived noun see C 5a Hdi *vəvərəm* 'deep pit' (compensatory redupl. < \**Hvr-m* < *Hfr-m*) 'deep pit'. A reliable cognate of Ch [\**H-fVr-*] (attested only in derivatives) is Sem \**hpr* 'to dig': Arab, Sab *hfr* 'creuser (la terre)' [BK II: 457, Bll: 182], Hbr, Aram *hpr*, Akk *hapāru* [KB: 322].

**380. \*fVr-** 'to move, run': C 7 Muy *ferey* 'to move', *fār* idf. 'running'. Deriv. in *-t-*: \**fVr-t-* 'to run away, to escape, to save os': W 1 Hs *fārcè* 'to run away', *fīrcè* 'to elude one', *fīrtà* 'to elude, escape'; C 5 Pod *fəratá* 'échapper, escape', Mlg *fārta* 'retten; entrinnen; to escape, to save os'.

Note E 5a Mig *pārsò* 'échapper, chuter d'un arbre, to escape'.

//Sem Arab *frr* 'e'enfuir, se sauver; courir' [BK II: 558], Ug *pr* (*pr*) 'fliehen' [Ais: 259].

For a root variant see: WCh 1 Hs *fállà* 'to run away'; C 5 Pod *vála* 'courir'//Sem Sab *fl* 'flee in disorder' [SD: 44].

**381. \*fVr-** 'to blow, winnow': W 1 Hs *fúurè*, *húurè* 'to blow away'; 2 Bura *ferar* 'to blow with breeze', *ferr* 'sound of a slight breeze' [BlB]; 7 Gis *far* 'to fan'; 9 Mulwi *firi* 'vanner', Mnj *fili* 'vanner au vent', cf. 7 Zlg *fārfār* 'haleter'.

//Cf. Cush Arb *fuur-* 'become bloated' [Hay].

Deriv. in *-t-*: W 1 Hs *fārfāčee* 're-winnowing'; C 5 'to blow': Pod *fəratá* Mlg *fārta*, Gdf *vrtá*, Gava, Chn *fřta*, *vřta*, Glv *fřt<sup>2</sup>ga* [HmG].

//Berb Ahag *efere* 'vent présage de pluie', Wlmd, Ayr *efare* 'vent de mousson venant du sud-ouest' [NZ: 608f].

Cf. [TN №491].

The following isogloss may derive from \**fVr-* 'to blow' or from \**fVr-* 'dust', cf. №383. \**[u]r-* 'uncultivated area' > 'dust', Sem \**af(a)r-*: 'dust':

**a. \*fifir-** (compens. redupl. < *HVfVr*) 'dust-devil': W 2 Mghw *fī-vír*<sup>45</sup>

<sup>45</sup> Accord. to TN №333, < AA \**bubir*, cf. №274. \*(*bV*)-*bVr-* 'wind, storm'.

(< *fi-fir*) ‘tornado, dust-devil’ [BIM], Mpn *vā-vir* ‘whirlwind’; C 7 Mol *vavele* ‘dust-devil’ (< *fi-vir* < *fi-fir*) [FsO]; 9 Msg *fūlfili* ‘Wirbelwind’ [LkM].

**382. C \**furi[y]*- ‘to love, to delight, be happy’:** 9 Msg *fāra* ‘be happy; sich freuen’ [LkM], Mlw *fríyí*, Mbara *fríi* ‘aimer’, Mnj *firiyi* ‘plaisir, bonheur, aimer d’amour; joie, agrément’; 10 Musey *furi-ra* ‘réjouir, la joie’ [ShyM], Gizey *fìrù*, Masa *fù/ìrìy*, Ham, Musey, Lew, Marba *fùrì* ‘bonheur, joie’ [LexC], Azum *furi-dà* ‘joy’.  
//Cf. Cush Saho *farhe* ‘to want, need’ [Vr].

**383. \**f[u]*r- ‘uncultivated area’:** W 1 Hs *fàràa-faràa* ‘arid soil’; 2 Ngas *fur* ‘open space in front of the house, generally surrounded by a stone wall’ [Fl]; 6 Duw *fàra-k* ‘open barren area’; C 1 Boka *fur-tà*, Gbn *fìr-tà* ‘ground’ [Kr]; 10 Dzpw *fùr* ‘terre inculté’, Musey *fùl-nà*, Hedè *fur* ‘uninhabited and uncultivated land’ [Shy]; E 5 Mig *páar* ‘terrain où l’herbe ne pousse pas’.

a. E 6 Mok *pùuré* coll. ‘dust’, *pùrùrú* ‘dusty, dirty’.

//Sem OffAram ‘*pr* ‘dust’, pl. ‘plot, terrain’ [HJ: 879], Ug ‘*pr* ‘dust; earth, ground, steppe’, Hbr ‘*āpār* ‘dust, soil’, Akk *eperu* ‘earth, dust’ [DUL: 171], Arab ‘*fr* ‘jeter qqn par terre et le rouler dans la poussière, rendre poudreux’ > ‘*afar-* ‘terre, poussière’, ‘*afr-* ‘poussière’ [BK II: 296f], Tigre ‘*afār* < \*‘*apar-* [Kg: 189].

For cognates of Eg *β.t* ‘Staub/dust’ or ‘Vervünschung/curse’ see [EDE II: 553].

**384. \**fVr-* ‘bark, shell’:** W 1 Hs *fúurú*, *húurúu* ‘skin of monkey-nuts’; 3 Tng *paara* ‘skin of the locust-bean pod’; 4 Diri *fu-fur* ‘bark’ [SkNB]; E 1 Kera *ké-fré* coll. ‘egg-shell’; 6 Mok *pùrnyó* ‘écorce d’arbre sp. (pour soigner les diarrhées)’.

Derived nouns: \**fur-k-* ‘bark’: C 7 Mnj *fotorok* (metath. < \**t-forok*); 1 Kera *fekre* ‘harte *Schale* (bei Nüssen), coquille’ (metath. < \**fVr-k-*); 4 Sok *firkía* [Luk], Ubi *pirika*, Mawa *purka* [HuJ].

Denom. verb: C 2 Bura *fira* ‘to pull out bits of loose skin’; 7 Mada *óvróm* ‘peler’.

//Berb Sened *ti-fre*, Ghdm *ti-fra* ‘écorce’ [NZ: 607]; Morocco dial. *afrekki*, Zng *tafərki*, Shilh, Ntifa *tiferkit*, Shawiya *tafercit*, Ahag *taferkit* ‘écorce’ [NZ: 626]. Note derivatives in *-k-* in Chadic and in Berber

languages. ECush Som *fur* ‘cork, cover’ [LIS].  
[AA 1 №65 Sem ‘skin’, Berb + Diri, Kera, Sokoro, HSED №838. For Sok, Kera cf. \**prk*].

**385. \**fu/ir-* ‘flower’:** W 1 Hs *fùree* ‘blossom of tobacco’<sup>46</sup>, Gwandara *hure*’ [JgIb]; 7 Mangar *fure* ‘flower’ < Hs [RC]; C 5 Dghw *firá*; 8 Bud \**phōríó* [JgIb] ‘flower’.

//Cush Beja *faar* ‘Blume, Blüte, Knopse’ (Sem Tgr *fr* id.) [RBd: 80], Om Yemsa *fu’ra* ‘flower’ [BnO: 340].

Accord. to [AA 1 №35] and [EDE I: 111f], Ch ‘flower’ is cognate with Eg *pr* ‘fruit, seed’. Note, however, that the correspondence: Ch \**f-* ~ Eg *p-* would be irregular, to say nothing on the sematic gap.

**386. \**fVr-* (a derived noun?) > *vVr-* ‘(part of a) hut, granary’:** W 4 Kariya *var*, Wrj *var-ai* ‘entrance hut’ [SkNB]; C 1 Tera *var kabà* ‘wall (of a room)’ [NmT]; 2 Chb *fār* ‘Hütte, Haus’ [HfC]; 5 Pod *vira* ‘chambre’; 6 Buwal *varvara* (compensatory redupl.) ‘courtyard’; 7 Mofu *ver* ‘chambre’, Mbuko *veray* ‘nouvelle maison’; 9 Mgs *furai* [LkM], Mnj *vre* ‘grenier’; 10 Masa *vire* ‘grenier’ [CC], Gizey, Lew *vér*, Masa *vér*, *fér*, *fré*, Ham, Musey *véé*, Lew, Marba *’ávír* ‘grenier à mil’ [LexC], Musey *veena* < *ver-na* (compens. lengthening of a vowel) [ShyM], Azum *avira* ‘a small silo, granary made in a shape of a bottle’, *avirâ* ‘a large granary’, *avirî-na* pl.

**387. \**fVr-(t/n)-* ‘finger’:** E 5 WDng *pérné*, EDng *pēernò*, Mubi *fèerí* [JgIb] ‘finger’. Cf. W 3 Bol *paala* ‘finger’ [Kl].

Deriv.: \**fVr-t/d-* ‘finger, nail’: W 1 Hs *fārçè*, pl. *fàràútaa* ‘fingernail, finger’; 6 Duw *vàre-d*, GBade *vàrà-d* ‘fingernail’; C 5 Wnd *fali-d-še* ‘nail’ [Kl]

//Cush \**pVr-* ‘finger’: Afar *fera* [RA], Saho *fera*, Som *far(-ta)* ‘finger’, Rend *farro* ‘finger, toe’ [PR], Boni *far* [Sam], Bayso *per*, Kamb *far* ‘finger’ [Dolg: 41f].

[ISv: 21].

**388. C \**far-* ‘cattle, wealth’:** 9 Mbara *fàrày* ‘bride's wealth’, Mnj *faray* ‘prix, richesse, troupeau, betail’; 10 Masa *fàri* ‘richeuse, dot’

---

<sup>46</sup> The following forms are Hausa loans: W 3 Krkr *fire* ‘tobacco blossom’, 4 Paa *pure*, Miya *furé*, Diri *fùrée*, Mburku *pùrée*, 5 Guus *pùer* ‘flower’, cf. [JgIb I: 146].

[CC], Gizey *fòrèy*, Masa *fàrèy*, Ham *fàrìy* ‘richesse, biens’ Gizey *frèy*, Masa *fàrèy*, Ham *fàrì* ‘animal domestique’ [LexC].

This ch root is hardly cognate with Sem *\*parr-* ‘young of small or large cattle’, as suggested in [SED II, №181].

For Mbara, Mnj, Masa < AA *\*br* see [TN №175].

**389.** W *\*fir-* (*\*fVyVr-*) ‘big’: 2 Ngas *fier* ‘largeness’ [Gr], Mush *fir* ‘bigness’, *kú-fir* ‘big, large’ [JgO], Goem *firr* ‘great’ [Fp], *fyer* ‘to be big’ [Hlw].

a. *\*fir-* ‘to overtake’: W 3 Dera *pàrí* ‘to overtake (a person)’ [NmK]. Cf. W 1 Hs *fàrtòo* ‘a big, strong fearless man’.

For a possible cognate cf. C *\*fir-* ‘crowd, many’: 6 Bana *v(ə)rəm* ‘foule debout ou en marche’; 9 Mnj *fara, firi* ‘foule’; 6 Buwal *vra-m* (*\*fr-* > *vr-*) ‘many’; W 1 Hs *fàràrà* ‘in immense numbers’.

//Sem Arab *fariyy-* ‘grand’ [BK II: 589].

**\*P**

**390. \*p(Vw)ay/- ‘to pay, give’:** W 2 Mnt *pèè* [JgC], Mush *pí* [JgO] ‘to give’, Goem *p<sup>h</sup>á* ‘to give someone smth’ [Hlw]; C 3 Bana *pá* ‘acheter’; 5 Pod *pa* ‘to take, give’, 6 Mina *pá* ‘to give’ [FrM]; 7 Mafa *pa* ‘mettre, donner’ (pl. obj.); 10 Dari *pō?* (< *paw?*-) ‘payer, rembourser’, Dzpw *pó’ó* ‘acquitter une dette; payer’; E 2 Lele *pōy* ‘rembourser’.

Cf. W 4 Miya *piyay* ‘to take back, return’ [Sch]; C 7 Gis *paw* ‘wegnehmen, to take back’. Note that terms for ‘to give’ and ‘to receive’ are confused in Geez.

//Sem Geez *wfy* ‘receive, grant, transmit, hand over, deliver, transfer’, Sab *wfy* ‘pay a debt’, Soq *’efe* ‘pay’, Tna *’awāfāyā* ‘give, make a gift’ [LsG: 607], Arab *wfy* ‘payer, acquitter (la dette)’ [BK II: 1578].

**391. \*pV<sup>?</sup>/w/- ‘to cover, protect, hide’:** W 2 Ngas *pee* ‘to shut, close’ [Fl], *pee* ‘to close, shut, cover’ [JgN], Mghv *páa* ‘to cover, close, shut’ [BIM], Mpn *páa* ‘to cover; to bury’, Mush *páa* ‘to cover’ [JgO]; 4 Paa, Jmb, Mburku, Tsagu *pu(w)-* ‘to hide’ [SkNB], Paa *pu, puwii* ‘to hide o.s.’ [MS], Miya *puwa* ‘hide’ tr., intr. [Sch], 7 Fyer *pa* ‘to shut, close’ [RC] (? < W 2); C 2 Bura *pua* ‘to cover with grass against weather’ [BIB]; 4 Gude *pa’a* ‘to close, cover’; 7 Mada *ápá* ‘(re)couvrir, mettre’, Mofu *-piy-* ‘protéger le mur d'une natte, (se) protéger’, Ould *-pàb* ‘couvrir’, Baka *pàvu* ‘fermer’ [BAS]; 10 Dari *pīē?* Dzpw *pé’é* ‘(se) cacher’.

Derived nouns: W 1 Hs *fáifái* ‘circular mat or tray used for covering vessels’ > W 2 Mghv *pyepye* ‘flat cover for calabash’,

//SCush Qwadza *pa?*- ‘to cover’ [Eh: 143], Berb Ntifa *nfi* ‘être caché, abrité’, Wlmd, Ghat *ifi*, Ahag *êfi* ‘abri’ [NZ: 682].

Cf. TN №457 (including metath. forms in Sem & Eg).

**392. \*pV<sup>?</sup>/w/y/- ‘to shoot, sting’:** W 2 Kupto *fēyéy* ‘to shoot, sting, kick, spin’, Tng *peyi* ‘to kick, shoot’, cf. Krkr *fi’yu* ‘to pinch’ [GK]; C 2 Bura *pwa* ‘to strike (in shooting)’ [BIB]; 4 Gude *pá?* ‘hitting of arrow’; 7 cf. Ould *pīyūw* idf. ‘coup de bec’; E 5a Mig *’úppó* ‘to strike, shoot (arrow and bow, fusil)’.

Cf. C 7 Mada *pàwpá* ‘sagaie’, W 3 Bol *pīu* ‘awl’ [GAB].

//SCush Dah *pah-* ‘hit, shoot’ [EEN], rift Irq *pa<sup>ç</sup>* ‘sound of sudden shooting out, for example a stone leaving a sling’ [MMQ].  
For Tng-Bura-Dah see [TN №379].

**393. \*p[a]w/y/?- ‘to cut, split’:** W 1 Hs *fáa-fâ* (Kats. *h<sup>w</sup>ah<sup>w</sup>a*) ‘to split open a gourd’, deriv. *fau-taa* ‘to cut up meat for sale’; C 7 Mbuko *paway* ‘to cut meat in pieces’, Muy *ápàwāy* ‘to split into pieces’; 8 Bud *phhayu, fayú* ‘schneiden, umhauen’ [LkBd], *fâyú* ‘couper’ [Awg]; 10 Masa *pòo* ‘couper en quartiers’ [CC]; E 1 Mobu *paye* (pl.) ‘casser’; 2 Lele *pōy* ‘casser beaucoup’.

Derived nouns: W 1 Hs *fáawà* ‘the work and profession of a butcher; cutting of animal’s mouth by a bit’, 3 Bol *pe<sup>ʔe</sup>* ‘Schröpfen’ [LkB], Tng *pawa* ‘act of slaughtering’.

//Sem Arab *f<sup>w</sup>y* ‘fendre, pourfendre d’un coup de sabre la tête de qqn’, *fa<sup>ʔ</sup>aw-* ‘fente, brèche’ [BK II: 530f], Hbr *p<sup>ʔ</sup>y* ‘to cleave, split’ [KB: 749]. Note 6 Mok *pówwò* ‘crevasse, trou (dans un arbre)’ as a possible arabism.

For a metath. cf. 5a WDng *ópè* ‘couper en deux’, EDng *òpè* ‘fendre le bois’ (< \*<sup>ʔ</sup>wp).

//Eg *wp* (gr) ‘zerteilen, zerstückeln’, *wp* (Nä) ‘Messer oder ähnl. Werkzeug aus Kupfer’ [EG I: 302].

The following isogloss is rather cognate:

a. C \**pay-/pVy-* ‘to harvest’: 7 Mada *pày* ‘(moissonner) à coups de faucille’; 8 Log *pia-wun* ‘to cut; harvest’, *tun a pia-wun* ‘harvest’ (n.), Kus *pia ho* ‘to cut’ [Al];

**394. \*pVy/w/?- ‘to pour’:** W 3 Gera *fîu-mí* ‘to pour’ [SchB]; 6 GBade *po* ‘to pour, empty out, pour out or put down several objects or a liquid’, WBade *po* ‘to pour, empty out’, Duw *pùwo* ‘to pour’, Ngz *páu* ‘to pour’; C 2 MrgC *pwá* ‘to pour in’, Mrg *pù* ‘to pour’ [HfM: 25], Bura *pu* ‘to pour’ [BIB]; 5 Mlg *púwa* ‘giessen, strömen’; 7 Gis *pi* ‘(hin)eingiessen’, Dugwor *má-páy* ‘verser’, Mofu *-p-* ‘pleuvoir’, Zlg *púwùw* ‘verser, répandre un liquid au loin’; 8 Makari *pe he* ‘sprinkle’ [AIM]; 9 Mlw *púwí* ‘puiser dans la marmite où est cuite la boule pour en servir les parts’; 10 Musey *po-ra* ‘verser’ [ShyM]; E 3 Tum *pè* ‘verser (remplir)’.

Derived noun (or a remote cognate): C 7 Mofu *piyá* ‘rainy season’; 9 Msg *pā<sup>ç</sup>*, *afiia* (\**pVH* > *fV*, see №№402, 405) [LkM], Mbara *piyà*,

Mnj *piya* ‘rainy season’; E 1 Kera *pépé* ‘Gott, Regen, Donner’.  
 //HEC *\*fo’o* ‘waterfall’: Had *fo’o*, Kamb Sid *fo’a* [Hds], Beja *fi/uf* ‘aus-, vergiessen, ausschütten’ [RBd], Arb *fo’-* ‘overflow’ [Hay], Berb *\*fy*: Shilh *ffi* ‘répendre, être, verser, êtrw, s’écouler’, Ntifa *ffi* ‘verser’, Ahag *effi* ‘verser (dans qqch), couler’, Snus *effiy* ‘verser (du thé, du café), Izns *effey* ‘transvaser, verser (liquide)’, Wlmd, Ayr *effey* ‘verser, couler (liquide)’, Ghat *effi* ‘verser (dans un récipient)’ [NZ: 681].  
 Cf. [TN №452 *\*pVh*].

**395. *\*pVw/y-* ‘to breathe, blow; wind, breath’:** W 3 Pero *púyò* ‘to blow; wind, air’, Kupto *fúu-tá* ‘breath’; C 1 Tera (dial.) *piya* ‘to blow’, *pi-di* ‘wind’ [Kr]; 3 Bana *piy* ‘aspirer, vivre’; 4 Gude *puu* ‘to blow strongly’; 10 Dzpw *pé* ‘respirer’ (for Dzpw *fó’ó*, Dari *fō’* ‘souffler’ see №290).

//SCush Bur *pupu’iya* ‘wind’, Alg *pupu’umis* ‘to flap, flatter (in wind)’ [Eh: 145]. Cf. Om Yemsa *ipuwa* ‘Sturm’ [LmY].

a. C *\*pV-* ‘to swell’: 3 Bana *pə* ‘gonfler, enfler’; 5 Pod idf. *pəvəva* ‘très gonflé’. Cf. 4 Gude *pəhəb* ‘very swollen’.

b. *\*pVy-* > *\*pVh-* (pl. in *-h-*): ‘to winnow’: W 3 Kupto *fiiyéy* ‘to separate corn (by the blowing wind)’; C 2 Bura *puha* ‘to winnow grain’; 3 Bana *pxá* ‘vanner’; 5 Pod *pava* (compens. redupl. < *papa* < *\*paha*)/

Derived noun: W 3 Bol *puuyò* ‘remnants of grain husks after sifting’.  
 //Sem Akk *pû* (*pa’u, pu’u*) OA, OB ‘chaff, husks (of grain, plants), straw, stubble’ [CAD p: 471]. Cf. Sem Akk *napû* (OB) ‘to sift’ [CAD p: 327], Geez *nafaya*, Aram *nəpā* (*npy*) ‘to sift’, Tna *nəfäyā*, Amh *nəffa*, Tgr, Harari *nəfa* ‘to sift’ [LsG: 390], Arab *nafa’-* ‘brins de plantes, d’herbes’ [BK II: 1303], Sem *\*npy* ‘to sieve’ [Kg: 342], Berb Shilh *afuf*, Morocco dial. *afif, ifif*, Qab *ifif* ‘être tamisé’, Izns, Ntifa *siff*, Sen *sif* ‘cribler, tamizer’, *sifef* ‘tamiser’, etc. [NZ: 512]. For Akk see [TN №521].

**396. *\*pVw(V’)-* ‘to tear (off), pull’:** W 5 Zaar *pwaá* ‘to pull sharply’ [CrZ]; C 4 Gude *pāwù* ‘tearing of cloth’; 7 Mofu *-puw-* ‘dépecer, déchirer, dépouiller’; E 1 Kera *pí* ‘enlever’, Mobu *pe* ‘enlever’, Ngam *pée* ‘arracher, déshabiller’; 2 Kaba, Nch *ba-puwa* ‘tirer’ [HmK].

a. C *\*pah-* ‘to peel’ (pl. in *-h-?*): 4 Gude *pwa’a* ‘to remove bark’; 7 Mada *ápah* ‘écorcher, racler’, Mafa *páh-* ‘écorcher, enlever’.

b. C *\*pVhVw-* ‘to pull, tear off, untie’ (pl. in *-h-* ?): 6 Daba *pōh* ‘arracher’; 7 Mafa *puh<sup>w</sup>*- ‘tirer’, Ould *pūh<sup>w</sup>* ‘se détacher’, Zlg *páhá* ‘détacher, ôter ce qui attachait’.

Deriv. in *-k-*: C 5 Pod *pəh<sup>w</sup>akə* idf. ‘enlever qqch qui est attaché’; 6 Buwal *pòh<sup>w</sup>òk<sup>w</sup>* ‘to pull away’.

**397. *\*pVy/?-* ‘to walk’:** C 7 Mnj *payay* ‘promenade’; 10 Masa *pày* ‘se promener’, Musey *póy*, Gizey *túd póy* ‘promener’ [LexC]. Cf. Dari *pā* ‘sortir’.

//Cf. Eg *py* ‘sich begeben’ [EDE II: 414].

a. *\*pVy-* ‘to arrive, return’: W 4 Miya *piya* ‘to return’ [Sch], Diri *piya*, Kar *piy-* ‘to return’ [SkNB], Wrj *pəy* ‘come back, return’, *pyiyi* ‘coming back, return from a journey’ [BIS]; C 5a Hitk *piy-* ‘treten’, 5 Pod *pavá* ‘to arrive’; 6 Buwal *páy* ‘(to be) arrived’.

//Sem Arab *fj<sup>?</sup>* ‘retourner, revenir’ [BK II: 651].

**398. *\*pVy/?-* ‘to dig, bury, (trans)plant’:** W 2 Mpn *páa* ‘to cover; to bury’ (reflexes of Ch ‘to cover’ & ‘to bury’ are confused in Mupun); 4 Wrj *pya-*, Siri *pyaa*, Kar *peya*, Paa *pi* ‘to (trans)plant’ [SkNB]; C 8 Zina *pâyà* ‘to bury’; 9 Mlw *pì*, Mnj *pi*, Mbara *pàa* ‘enterrer, planter’, Msg *pa* ‘begraben’ [LkM]; 10 Masa *pì* ‘planter, enterrer, repiquer’ [CC], Dzpw *pé* ‘planter’, Dari *pāy* ‘déterrer’, *pīē* ‘planter; Gizey, Masa, Ham, Musey *pí*, Lew, Marba *pé* ‘planter’ [LexC]; E 1 Ngam *pée* ‘creuser’; 2 Lele *pē* ‘creuser, déterrer’.

//SCush Qwadza *po<sup>?</sup>otis-* ‘to dig (hole)’, Alg *po<sup>?</sup>o* ‘hole in the ground’, *po<sup>?</sup>is-* ‘to bore hole’ [Eh: 148].

a. *\*<sup>?</sup>Vp(p)-* ‘to dig out’ (plurac.): W 3 Tng *ope* ‘to dig out’, Bol *<sup>?</sup>opp-* [GAB], Krkr *āfā* [GK], Krf *<sup>?</sup>opp-* ‘to dig’ [St], Kupto *<sup>?</sup>oppéy* ‘to dig, to drill, to excavate’ [LgK]; E 4 Mawa *opon* ‘évider, creuser (puits, trou), enterrer’, Ubi *<sup>?</sup>opi-n* [Alio], Sok *ápè* ‘dig’ [JgIb], note Saba *<sup>?</sup>apke* ‘to burry’.

[JgIb *\*-p-* ‘to dig’].

**399. *\*pa<sup>?</sup>-/\*HVp-* ‘to sweep’:** W 4 Wrj *pəpə* (< *\*HVp*, compensatory redupl.) [BIS], Paa *pei* [MS] ‘to sweep’; 5 Zaar *paa* ‘to scoop out the surface of liquid in order to clean it’ [CrZ]; C 3 Bana *pà* ‘balayer, ramasser’, FK *mpà* ‘to sweep’; 10 Dari *pó<sup>?</sup>ó* ‘brosser, nettoyer avec une brosse’; E 1 Kera *pé<sup>?</sup>é* ‘enlever la poussière avec une branche’. Cf.

C 5 Mlg *púwa* ‘schreiben’.

//Sem Arab *fw (u)* ‘effacer (l’écriture, etc.)’ ‘Le vent a effacé les traces...’ [BK II: 304], Cush Sid *f-* ‘to sweep’ [KS : 44].

The following root may cognate (cf. reflexes in C 10):

a. **\*pVw-** ‘to clear land for farming’: W 1 Hs *fâa-faa* ‘to clear a large tract of uncultivated ground for farming’; 10 Gizey, Masa, Ham, Lew, Musey, Marba *pó* ‘débrousser’ [LexC], Masa *pò* ‘débroussailler, défricher’ [CC], Musey *po-ra* ‘nettoyer le champs avant de le semer’ [ShyM].

**400. W 4 \*pa-** ‘to gather’: Wrj *pa* ‘to gather, join, meet’ [SkNb, BIS], Miya *pa*, pl. *pàhiy* ‘to collect, gather’ [Sch], Paa *pá* ‘to gather’ [MS]; C 3 Bana *pà* ‘balayer, ramasser’ (reflexes of Ch ‘to sweep’ & ‘to gather’ conflated in Bana).

a. **\*pVw/y-** ‘many, all’: W 2 Ngas *peep* ‘all, whole’ [JgN]; 3 Tng *pip* ‘all’; C 2 Bura *pwapwa* ‘all’ [BIB]; 7 Mina *pè* ‘much’ [FrJ]; 7 Mada *pày* ‘tout’, cf. Muy *pāy* idf. ‘appearing totally’; 8 Log *piya* ‘many’ [AIL]; 10 Azum *pappa* ‘all (absolutely)’; E 3 Smr *píiya* ‘alles, alle’ [Luk]. Cf. W 3 Bana *pàfǎ* ‘plein’.

//Cf. Sem Arab *wfy* ‘être abondant, complet’ [BK II: 1578].

Cf. TN №332 *\*p(p)*, № 378 *\*ph*, №522 *\*PP*.

**401. C \*(m)pa(?)-** (< *\*mVpV²-*) ‘to fight’: 2 Bura *mpa* [BIB], MrgC *mpà*, Klb *pà* [MuK] ‘to fight’; 3 Bana *pá* ‘faire la guerre’, FK *mpá* ‘to fight’ [BIFH], Hya, Kap *mpa* ‘war (fight)’ [BIH]; 4 Gude *pa* ‘to fight’, *pəʔu* ‘to kill many people, animals’.

//Sem Arab *nfh (a)* ‘atteindre qqn légèrement avec un sabre, ne lui faire qu’une égratignure’ III ‘lutter avec qqn, combattre qqn’ [BK II: 1305]

**402. \*paʔy-, \*²apaVy-** ‘milk, female breast’: W 4 Paa *api*, Siri *ipi*, Diri *yapu*, Jmb *ifi*, Kariya *api*, Mburku *píi-hu*, Tsagu *iipə-n* ‘breast, milk’ [SkNB]; Wrj *píi-na* ‘breast, milk’, *pyi-na* ‘sour milk’ [BIS], Miya *ápíy* ‘breast, milk’ [Sch]; C 7 Mbuko *páy* ‘sein, lait’; 9 Msg *fíiau* (*\*pV²-* > *fV²-*, see №394) [LkM]; 10 Dari *pāʔ* ‘sein’, Dzpw *paʔ* ‘lait, sein’, Azum *apo-na* ‘the breast, human milk’, Masa *pò* [CC], Musey *po-na* ‘sein’ [ShyM], Lew, Marba *ʔápó*, Ham *mbò* ‘sein’, Gizey, Masa *pòpò* ‘sein des animaux’ [LexC], Masa, Musey, Marba, Peve *pāʔ*, Hede *paʔ*,

Zime *pa* ‘breast’ [Shy]; E 4 Sok *paió* ‘Milch’ [Luk], Ubi *paawò* ‘milk’, *pay-nà*, Mawa *payi* ‘sein’; 5a Mabire *pay* [HuJ], (Lallwort) Mig *púupú* ‘sein’, WDng *pòopìy*, EDng *póopí* ‘le sein, la poitrine, la mamelle’, 5b MM *fàafè*, Kaj *fàafè* ‘lait’, *fàafò*, Brg *fifó* ‘sein’.

//For cognates of Eg *ph* ‘Euter’ see EDE II: 491. Cf. Berb Shilh, Fig, Ntifa, Mzab, Qab *iff*, Ghat, Sened *ifef*, etc., ‘sein, mamelle’ [NZ: 508f]. Note WCh ron gr.: Fyer, Kul *fuf*, Bok *fof* ‘breast’ as possible Berber loans.

Cf. Sem Amh *fäyā* ‘to suck the breast, to drink milk’, gurage gr. Muher *fw-at*, Soddo *aa-fa-t*, Gogot, Gafat *a-fwa-t* ‘milk’. Accord to [AA 1 N°53], Ethsem forms are cognate with Berber and WCh ron.

**403.\*pVw-** ‘gruel, meal’: W 3 Kupto *fòo* ‘food, tuwo’; C 2 Bura *mpwa* ‘flour, meal; balls of guinea corn and peanut flour, wrapped in leaves & boiled’; 7a Skn *powa* ‘millet flour (dry or mixed with water as thin gruel)’ [DS], *pwa* ‘powder’ [ThS: 43].

a. **\*pVy-** ‘to eat (soft)’: W 3 Pero *púyò* ‘to eat up’; 5 Wnd *piya* ‘to graze’ [Voc]; 7 Vame *piya* ‘manger’, Mbuko *pa* ‘manger (mil)’, cf. *āpā* ‘fourrage’.

//Cf. Eg *pw* 21 ‘Opferspeisen’ [EG I: 506]. For a part of Ch forms see TN N°384 *\*p[ʔ]* ‘to eat’.

**404. \*pay-** ‘kind of net, trap’: W 1 Hs *fáifái* ‘part of a net or snare’; C 10 Masa, Musey *pày*, Lew, Marba *pèy* ‘nasse à poisson’ (= ‘chambre de capture’ ?) [LexC: 38], Azum *pai-na* ‘a fish trap, in course of constructing’, *pai-dá* ‘a fish trap, in place’.

Any relation to N°391. **\*pV<sup>ʔ</sup>/w-** ‘to cover, protect, hide’? Note that terms for ‘mat, cover’ and ‘part of a snare’ are confused in Hausa.

**405. \*pV<sup>ʔ</sup>/wVy-** ‘field, earth’: W 3 Pero *péepè* (compensatory redupl.) ‘earth’; cf. Bol *puuya* ‘courtyard of a compound’ [GAB]; 7 Sha *pyà* ‘best Land, weicher Erde’ [JgR]; C 3 FK *pwày* ‘field’; 9 Msg *fówái* (*\*pV<sup>ʔ</sup>Vw-* > *fVw-*, see N°394) [LkM], Mnj *vuway* ‘champ, jardin’.

For a root-variant see the next isogloss (note that both roots are attested in C 3 FK).

a. C **\*pVyVw-** ‘field, plot of land’: 3 FK *pwìyày* ‘plot’; 5 Pod *vúhwa* ‘champ’ [Mo:19]

//Cf. Eg *ph<sup>ʔ</sup>.t* [if=ph<sup>ʔ</sup>] Nā ‘Art Acherland’ [EG I: 544].

**406. \*paw-p-** ‘kind of tree’: W 2 Goem *papai* ‘a type of tree’ [Hlw]; 6 Duw *pòopo* ‘the trees *Crateva religosa*’; C 2 Bura *puba* ‘tree’ [BIB]; 6 Mbedam *mpay* [NdM], Mina *pây* ‘tree’ [FrM]; E 1 Ndam *pāy* ‘brousse’.

//Sem Geez *fewā* ‘dark wood’, (T.K.) ‘rotten log or name of a tree’ [LsG: 172].

**407. \*pap-** ‘shoulder (blade)’: W 3 Bol *pappà* ‘shoulder blade’ [GAB]; C 6 Daba *pàpá* ‘la plume’, Mbedam *púmpa* ‘wing’ [LMb]; 7 Ould *pēpē* ‘omoplate’; 8 Kus *papa* ‘shoulder’ [AIK]; 10 Dari *pāpá* ‘omoplate’. Compensatory redupl., cf. CCh **\*hVp-** ‘shoulder’: 5 Glv *áhyepa* ‘shoulder’; 7 Mada *ahpá-t* ‘épaul’.

**408. C \*pa<sup>2</sup>Vw-** ‘cotton (thread)’: 2 Bura *powa* ‘cotton’ [BIB], Klb *pàwà* [MuK]; 7a Skn *pa<sup>2</sup>wa* ‘cotton thread’ [DSk], *pa<sup>2</sup>wa* ‘cotton’ [ThS: 23]. Note 3 FK *páw* ‘shirt’.

May be cognate with **\*pVy/w-** ‘white’.

**409. C 10 \*(pV)pay<sup>2</sup>-** ‘rib(s), side’: 10 Lew *pèpèy*, Marba *pìpèy* ‘côtes’ [LexC], Musey *pay-na* ‘la côte, le côté’, *pay* ‘à côté de, près de’ [ShyM], Azum *papei-na*, ‘ribs’.

//Sem Geez *fe* ‘to this side’, Hbr *pe<sup>2</sup>ā(h)* ‘side, edge’ [LsG: 154].

**410. \*pVy/w-** ‘white’: W 2 Grk *pya<sup>2</sup>* [JgC], Ngas *pée* ‘to become white, bright’ [JgN], Mghv *pyáa* ‘to be white, fair, clean’ [BIM], Mpn *pyá*, Mush *pyáa* ‘to be(come) white’ [JgO], Chip *píya* [Kr], Mnt *pia* [JgC], ‘white’, Goem *pyá* ‘to whiten or clean smth, to become white or clean’ [Hlw]; 3 Kupto *fêe*, ‘white’, Tng *pεε* ‘blank(ness), white(ness)’, Gera *fêewà* [SchB], Krf *feewa* ‘white’, *feewu tar* ‘moon-white’ [Stl], Pero *pé* ‘white, light’, Bol *pee* ‘white’, *pee-tire* ‘moonlight’ [Bn], *pee-tire* ‘full moon’ [GAB], Maka *pée* ‘white’, Bure *pèewà*; 4 Wrj, Kar *pyau-naa* [SkNB], Miya *pyòoya* ‘white’ [Sch]; C 3 Bana *pay* ‘blanc’, 4 FJ *pwà-yin* ‘white’ [Kr], Gude *pwáh* ‘very white’; 8 Log *paw* ‘be white’ [AIL], Kus *pow* ‘be white’ [AIK].

a. **\*pay-t-** ‘white’: W 2 Mghv *pétpét* ‘intensifies white’ [BIM]; 6 Duw *peet*, Bade *peetà* ‘white’, Daba *pátpát* ‘clair’.

b. **\*pa(wV)-k-** ‘very white’ (pl. in *k* ? or fem. n *-t* - (see above), mask. in *-k-??*): W 3 Bol *pok* idf. ‘whiteness’ [GAB]; 6 WBade *pakpaka* idf.

indicates whiteness; C 2 MrgC *pwákù* ‘snow white’, Bura *pwak(u)* ‘very white’ [BIB]; Cf. E 1 Kera *pəkay* ‘sorgho sp., mil blanc’.  
 //SCush rift Alg *poy* (idf) ‘very white or grey from dirt’, Bur *poy* ‘very white’ [Kies], ECush dull Harso, Dob *pi<sup>ʕ</sup>a*, Goll *pi<sup>ʕ</sup>a* ‘weiss’ [AMS]<sup>47</sup>. Cf. Sem Arab *fūf-*, *fawf-* ‘tache blanche qui paraît aux ongles chez lez jeunes garçons’ [BK II: 647].

**411. \*pVd- > pVd-** (dissim. of polosives) ‘to make a hole’: W 2 Hs *h/fiudà* ‘to pierce, bore hole’; C 10 Azum *pedä* ‘to plant by making a hole, to make a hole with a stick’  
 Derived noun: C 7 Mol *pəde* ‘hole’ [FrO], Baka *pidi* ‘trou’ [BAS].  
 //Cf. Ethioseme Harari *fuddi*, Gur *fodo* ‘anus’ [LsG: 162] (if not < \**fnd*, see №524).

**412. \*pVd- > pVd-** ‘to cut’: W 3 Tng *pide* ‘to cut open, sting, puncture a boil’; C 5 Pod *pide* ‘tailler, éplucher’; 7 Mada *épde* ‘tailler, évider, éplucher’, Mofu *-pádŵ-* ‘partager en coupant, fractionner’; E 1 Mobu *pade* ‘cueillir; couper (fruits)’.  
 Derived noun: W 3 Pero *pidà*, *pidà* ‘wound’// Cush Beja *fade* ‘die Narbe’ [RBd].  
 Deriv. in *-k-*: C 6 Mina *pədək* ‘to split’ [FrJ], Mbedam *padaku* ‘fendre’ [LMb], Buwal *pədək* ‘to slice’, Gavar *pədok* ‘trancher’; 7 Mofu *-pədk-* ‘fendre, séparer, tatouer’, *-pədk<sup>w</sup>-* ‘(se) blesser, se couper, percer’, Chuv *mépədəkèy* ‘fendre (bois)’, Mol *pədəkay* ‘to chop’ [FsM].  
 Cf. E 5a Bid *pidàny* ‘ouvrir la ventre d'un animal tué à la chasse; opérer’.  
 Derived noun (or a loan): C \**pVdVk-* ‘razor’: C 4 Gude *pidək<sup>w</sup>á* ‘type of razor’; 6 Buwal *pədək<sup>w</sup>* ‘razor’; 7 Mol *pedəwk* ‘razor’ [FrM], Mafa *púdék<sup>w</sup>-* ‘lame de rasoir, en fer’, Mofu *pədək<sup>w</sup>* ‘rasoir’, Zlg *pədəkw* ‘hache’; 7a Skn *pidok<sup>w</sup>* ‘razor’. Cf. CCh \**pidək<sup>w</sup>* ‘rasoir’ [GrR].

**413. \*pVd- > \*pVd-**<sup>48</sup> ‘to skin, to cork’: W 1 Hs *fēdà* ‘to flay, skin, draw a fowl’; 3 Pero *póddò* ‘to peel (yam, potato)’; 6 Daba *pəđ* ‘arracher, enlever qqch’; 7 Mofu *-pádŵ-* ‘s’écortcher’; 9 Mlw *pidí* ‘peler, éplucher avec un couteau, une hache’, Mbara *pid* ‘to polish’; E 5a Mig *pidáw* ‘éplucher’.

<sup>47</sup> For dullay < AA \**b<sup>ʕ</sup>* ‘white’ see [TN №120].

<sup>48</sup> Dissim. of plosives, note *-d-* in cognate forms.

Cf. C 5 Pod *pidē* ‘tailler, éplucher’; 7 Mada *épde* ‘tailler, évider, éplucher’. Reflexes of two independent roots conflated in these languages (see the previous root).

//ECush Som *feyday* ‘take off covering or clothes, strip of’ [LIS]. Berb Ahag *fadey* ‘être écorché, s’écortcher’, Wlmd *fudi* ‘être écorché au dos’, etc. [NZ: 530].

The following isogloss is cognate:

C **\*pVd-** ‘to brush, sweep’: 7 Muy *pādādā* ‘cleared, swept’, Zlg *pàd* ‘ôter une liquid en passant qqch’; 10 Azum *podā* ‘to brush, dust off’.

**414. \*pVd- > pVd-** ‘to pull out, remove, extract’: W 3 Krkr *fādu* ‘take out, remove, undress’ [GK], Bol *podu* ‘to take out, remove’ [GAB], Kupto *fōdēy* ‘to remove anyth, pull of’, Tng *podī* ‘to take (out), pull out, detach, choose, select’, Dera *pōri* ‘to take out, pluck out’, pl. *pōdē* [NmK], Pero *pidū* ‘to extract’, *podō* ‘to pick out a thorn, dig clay’, Gera *fād-mī* ‘to remove; pull out’ [SchB]; 5 Grnt *poodi* ‘to tear’ [Hr]; 6 Duw *pūdo*, GBade *piidu* ‘to draw, pull out’; C 6 Musgoi *pād* ‘dépouillir’ [Mo: 24].

Pluract. **\*pVdā-**: W 3 Kupto *fōdēy* ‘to pluck (only cotton)’; E 5a Mig *pidō* ‘pincer’.

Derived verbs: a. E 5a Bid *pedēč* ‘récolter des arachides’, Mig *pidičó* ‘cueillir des feuilles une à une’; 6 Mok *pēdīsē* ‘extraire qqch du corps (une épine)’.

b. E 5a **\*pidātk-** > *pitk-*): EDng *pit/dkē* (*nó pidāki*) ‘arracher’, WDng *pètkè* (< *pèdikè* ?) ‘arracher, arracher un bouchon de terre’.

//Sem Arab *nfd* VIII ‘tirer, extraire’ [BK II: 1306].

**415. \*pVHVd-/\*pVdd- > pVd-** ‘to dig, bury’: W 1 Hs *h/fiūdā* ‘to bank up (growing corn), make ridges for sowing potatoes’; 3 Kupto *fiūdēy* ‘to ridge up’; 5-5a Lmn *padā*, Vemgo *padō*, Gvoko *padube* ‘to bury’ [HmG]; 7 Chuv *mévédēy* ‘déterrer’.

**416. \*pVd(d)- > pVd-** ‘to pour out; rain’: W 4 Paa *pūda* ‘to pour out’ [MS]; C 2 MrgC *pādō* ‘to rain’; 6 Mok *pidāē* ‘cracher’.

Deriv.: C 3 Bana *pādāmà* ‘couler très fort (d’une rivière en saison de pluies)’, cf. W 1 Hs *fādāmà* ‘land which is flooded in the wet season’.

a. E 5a **\*pVdVy/w-** ‘rainy season’: Mig *pidiwánj*, Bid *pude*, WDng *pūdiyà*, EDng *pūdiyā*; 5b Brg *fidī* ‘la saison des pluies’.

//Cf. Sem Arab *fyd* ‘humecter, mouiller’ [BK II: 652].

**417. \*pVdVH- > \*pad-** ‘to grind’: C 5 Pod *pəda* idf. ‘taper, cloquer’; 6 Daba *pad* ‘piler’; E 1 Mobu *pábádé* ‘frotter’; 5a Bid *pódpòd* ‘broyer, froiser’. Cf. EDng *páadé* ‘marteler le fer rougi au feu’.

Cf. W 3 Bol *pìdì* ‘hard black stone (for roughing grinding quern)’ [GAB].

//Cf. Sem Arab *fdh, fdġ* ‘casser, briser, écraser avec une pierre’ [BK II: 555f].

**418. W \*pVd-** (< \*pVdd- ‘to untie, unfold’): 3 Pero *piddò* ‘to unbind’, Gera *fòodā-mí* ‘to untie’ [SchB], Tng *pedē* ‘to untie, loosen, unfold’; 4 Paa *pidā* ‘to lay out (straw before plaiting)’ [MS].

//Sem Akk *padû* ‘to release, relent’ OB, SB, NA [CAD p: 6], Arab *fdy (i)* ‘donner la liberté à qqn’ [BK II: 557].

**419. C \*pVd-** (< \*pVdVH-) ‘to wrap, bandage’: C 2 Klb *mpədû* ‘to roll up’ [MuK]; 5 Pod *pedē* ‘to roll up, wrap up’; 6 Daba *pad* ‘retourner, bander’; 7 Cuv *mépèdēy* ‘enrouler’, Zlg *pádā* ‘envelopper, entourer’ > *pádā ákábá* ‘enrouler, rouler une chose sur elle-même’ (*ákábá* ‘sur soi’), Merey *padá* ‘to pack, to pack’, Mafa *pád-* ‘enrouler, bander’, *pádavi ged* ‘bandeau de tissu’, Mofu *-pad-* ‘rouler, enrouler’. Cf. E 1 Mobu *podde* ‘couvrir’.

Note that 2 root variants (cf. №305. \*fVHVd- ‘to gather, roll up, pack’) differ in Podoko. On the other hand, reflexes in Mofu differ only on the phonological level: C 7 Mofu *-pad-* ‘rouler, enrouler’ & *-fad-* ‘rouler, enrouler’.

//Sem Akk *napdû* (SB) ‘tie, bandage’ [CAD n<sub>1</sub>: 291], ‘Ferstärkungsband’ [AHw].

**420. \*pat-** ‘to tear, extract: W 1 Hs *fättà* ‘to tear, rip’; 6 Duw *pàatiyo* ‘to strip palm leaves for weaving’; 9a Gdr *-pt-* ‘to uproot’; 10 Masa, Musey, Marba, Peve, Hedē *pat* ‘to extract’ [Shy], Gizey, Masa, Musey, Ham, Lew, Marba *pát* ‘extraire’, Gizey, Masa, Musey *pát* ‘arracher’ [LexC], Musey *pad-ta* ‘arracher, enlever, cueillir’ [ShyM], Masa *pàt* ‘enlever, arracher, récolter; castrer’ [CC], Dzpw *pát* ‘retirer, épiler, enlever; ôter, castrer’, Dari *pāt* ‘enlever, ôter’, Azum *pata* ‘to remove, extract, to castrate’; E 1 Ngam *patí* ‘cueillir’.

Deriv. in *-k-*: C 6 Buwal *putok<sup>w</sup>* ‘to tear in passing’.  
For a roott-variant cf. 430. *\*pit/ɸ-* ‘to peel, pluck’.

421. *\*patt-/\*paw/yVt-* ‘to pour’: W 3 Bol *pàttu* ‘pour, spill’ [GAB],  
cf. Pero *pàttò* ‘to put in, spill’, Kupto *fàttéy* ‘to pour (in, out)’; E 5a Bid  
*pet* ‘transvaser’, *pòyot* ‘puiser de l’eau’, WDng *pâytè* ‘verser de l’eau  
par terre en grande quantité’, Mig *pòotò* ‘verser’.  
Derived noun: W 3 Bol *pìto* ‘rain [Bn], *pìto* ‘rain, storm’, *pàttàana*  
‘waterway, route that water follows during rain’ [GAB].  
Deriv.: W 3 Pero *pút-dô* ‘to wash’.

422. *\*pVt-* ‘to go (out)’: W 1 Hs *fita* ‘to go out; (crop) to germinate’;  
2 Ngas *put* ‘to come out, go forth’ [F1], *put* ‘to go out, come out;  
happen’ [JgN], Chip *pút* [Kr] ‘to go out’, Mpn *pūt*, pl. *pwát*, Mush *pút*  
‘to go out, come out’ [JgO], Mghv *put* ‘to go out, get out’ [BIM], Goem  
*pát* ‘to exit, go out, appear’ [Hlw]; 3 Ngm (dial.) *fàta*, *hàtâ* [NEH], Tng  
*pódi*, Krkr *fàtaa* [GK] ‘to go out’, Bol *pàtaa* ‘go out, exit’ in Vent ‘to  
sprout, germinate’ [GAB], Pero *pétò*, Bele *fàti-kò*, Gera *fîd-mi*, Glm  
*páz-* (*-z-< -t-* is regular), Krf *fat-* [SchB]; C 4 Gude *pitə* ‘to go, pass by’,  
Gudu *pit* ‘to go’ [JgIb]; 6 Daba *pát* ‘sortir de la maison’; 7 Mofu *pát*  
*pét* ‘sortir brusquement’, *pēīt* idf. ‘running’; E 3 Tum *pád* ‘passer’.  
Note W 3 Kupto *féktá* (internal *-k-* pl.) ‘to go out, to come out, to  
appear; to germinate’;  
//Cush agaw *\*fät-* ‘to go’ [ApAg], Berb Shilh *ftu* ‘partir, marcher, aller’,  
MC *ftu* ‘partir, s’en aller’ [NZ: 667].  
[Nm *\*pəta*, JgIb *\*pt*, AA 1 №54 *\*ft*, №43 *\*pt*].

423. C *\*pVt-* ‘to untie, disconnect’: C 4 Gude *pitə* ‘to unfasten; break  
off tree limbs’; 10 Dari *pút* ‘détacher, dérouler, démêler’, Ham *pót*,  
Marba *pát* ‘retirer (une corde)’ [LexC], Dzpw *pát* ‘se peigner’.  
Cf. E 4 Sok *fitifiti* ‘öffnen, lösen’ [Luk]; 5a Bid *pit* ‘ouvrir’; C 7 Mofu  
*-páth-* ‘écarquiller (les yeux), ouvrir (l’anus)’.  
a. Secondary *f-* in Sokoro can not be excluded. In this case all Ch forms  
follow *\*pVt(Vh)-* ‘to untie, to open’ (for the same semantic link see  
Geez).  
b. Alternatively, Mofu *-páth-* may be considered an Arabism. In this  
case it is reasonable to postulate CCh *\*pVt-* ‘to untie, disconnect’ and  
ECh *\*fit-* ‘to open’ cognate with Sem *\*pḥ-*.

//Sem Akk *petû, patû* OAkk ‘to open’ [AHw: 858], Ug *pth*, Hbr, Phn, Pun, Aram *pth* ‘to open’ [DUL II: 675], Arab *fth* ‘ouvrir’ [BK II: 532], Geez *fatha* ‘open, untie, release’, Sab *fth*, Ethiopic *fth* > Cush Bilin *fätah*, Beja *fetah* ‘open’ [LsG: 170], ‘öffnen, auf tun’ [RBd].

**424. \*pVt- ‘to escape, disappear’:** 3 Bol *pittu* [GAB]; 4 Paa *patèe* [MS]; 6 WBade *pätu*, Duw *àpčùwo*, VN *àptà* ‘to get lost, disappear’; 7 Monguna *pwét*, Mundat *pwét*, Karfa *pwet* ‘to escape’ [RC]; C 5 Pod *putə* idf. ‘se sauver’.

Deriv.: W 6 WBade *pät-ku* ‘to escape’.

//ECush dull Dob *pata* ‘verloren’, Goll, Dob *pat-* ‘verlorengehen, disappear’, Dob *pat-* ‘verschwinden’ [AMS].

**425. \*pVtt-/\*pVHVt- ‘to cut into pieces’:** W 2 Mghv *pet* ‘aufschneiden’ [JgS]; 3 Pero *pétto* ‘to cut into pieces’; 4 Paa *patà* ‘to split’ [MS]; 6 WBade *pittu* ‘to slit, cut slit in’; C 4 Gude *pwatə* ‘to cut animals into pieces’ (plurac. in -w-); 5 Pod *pətə* idf. ‘couper’; 6 cf. C 6 Buwal *pèt* ‘to harvest’; 7 Mada *pápàt* (compensatory redupl < *Hpt/pHt*) ‘(couper) d’un coup’, Mafa *pat-* ‘tailler, rendre pointu’, Mbuko *pépet* ‘to cut small pieces’, Mol *pataw* ‘to cut’ [FsM]; E 5a Mig *pèetò* ‘fendre, tatouer’, Bid *peet* ‘fendre un bois, bifurquer, cicatriser’.

For C 7 Mafa *pat-* ‘tailler, rendre pointu’ cf. C 6 Mina *pèt* ‘to sharpen’ [FrJ].

Deriv. in -k- : C 6 WBade *àpčəku* (< \**pt-k*) ‘to cut piece off’; C 7 Mofu *-pətk<sup>w</sup>*- ‘percer (un bouton, citron)’. Note also C 7 Mbuko *péték* idf. ‘small portions’.

//SCush rift Irq *pa<sup>ʿ</sup>at* ‘be split’ [MQk]. Cf. Sem Arab *ftt* ‘fendre (pierres), casser, broyer’ [BK II: 531]. For Irq *pu<sup>ʿ</sup>uut* ‘to burst, pop’ [MQK] cf. WCh 2 Mghv *pet* [BIM], Mpn *pèt* ‘to burst, explode’.

[JgIB \**pt* ‘to cut’].

**426. \*pVt- ‘to winnow, blow away’:** W 2 Ngas *pat* ‘blowing away smth in the wind’ [FI]; 3 Ngm *àptà* ‘to winnow using faifai’, Tng *peede* ‘to winnow, fan’; 5 Bogh *paat, paadwii* ‘to blow’ [Cs], Guus *pipiitá* ‘to fan’ [CrG].

Deriv.: a. E 5a WDng *pàtər pàtər* ‘emporté par le vent’

b. C 7 Mofu *-pət-k-* ‘vanner, séparer (une graine de sa coque)’.

For a root variant see №312. **\*fVt-** ‘to blow, to start fire’:

Cf. Bol *pito* ‘wind’ [Kr], *pito* ‘wind, storm’ [GAB], *pito* ‘rain’ [Bn]. Probably, reflexes of *\*fit-* ‘wind’ and *\*pVt-* ‘rain’ conflated in Bolewa.

**427. \*pV(wV)t-** ‘to exceed, surpass’: W 1 Hs *fifità* ‘to surpass’; C 5 Pod *pata* ‘dépasser, faire trop’; E 5a WDng *pàatiyè* ‘dépasser la mesure’, EDng *pòtiyē* ‘rester, être en trop, dépasser la mesure’ < Arab? 6 Mok *piutè* ‘dépasser, vaincre’.

//For a possible cognate cf. Sem Arab *ftw* ‘surpasser qqn en générosité et en qualités mâles’ [BK II: 541], *fw* ‘dépasser, devancer qqn avec qqch’ [BK II: 683].

**428. \*pVt/t-** ‘to sweep, rub’: WCh 2 Ngas *pet* ‘to sweep’ [Fl], Goem *pàt* ‘to wipe or brush smth, rub smth lightly’ [Hlw]; C 7 Baka *patáy* ‘balayer’ [BAS]. Mol *patay* ‘to wipe, rub’ [FsM]; 10 Azum *petà* ‘to strop (a razor); to rub (ochre into gourds)’; E 5a cf. WDng *pàt* ‘glisser’. Derived noun: W 2 Ngas *mpèt* [JgN], *pet* [Fl], Mpn (*m*)*pét*, Mghv (*m*)*pét* [BIM], Goem *mpàt* [Hlw] ‘broom’.

//Cf. Berb Shilh *afud* ‘être balayé, essuyé, nettoyé’ [NZ: 532].

**429. \*pVt/t-** ‘to shoot an arrow’: W 2 Mush *pet*, *peet*, pl. *perep* (< *pete-p*) ‘to shoot an arrow’ [JgO]; 5 Bogh *pyiita*, Mng *piir*, *piidi* ‘to shoot’ [Cs]. Derived noun: C 7 Gis *petew* ‘Pfeil’.

//Cf. Sem Geez *naft* ‘rifle’, *nafaṭa* ‘to shoot’ (denominative), from Arab *naft*, from Akk *napṭu* ‘Naphta’ [LsG: 390, AHw: 742].

**430. \*pVit/t-** ‘to peel, pluck’: W 4 Paa *pitàa* ‘to pluck’ [MS]; C 7 Muy *épètèy* ‘to peel’, Mofu *-pápət-* ‘to bark, peel’, Baka *mí-pete* ‘éplucher’ [BAS], Mafa *pit-* ‘décortiquer’; E 1 Kera *pété* ‘to pluck feathers, bark’; 4 E 4 Mawa *pitiŋ* ‘retirer’, Barein (dial.) *póotó*, *pooto*, *pōotó* (< *\*pwt*) ‘to shell (peanuts)’.

Deriv.: E 5a WDng *pitinye* ‘décortiquer, défaire, déunir’.

Derived noun: E 4 Barein (dial) *pitti*, *pittá* ‘bark’ ~ ECush dull Harso, Dob *feete* ‘bark’ [AMS].

//Om Shin *fèèt-* ‘schählen’ [LSh], Sem Soq *ft<sup>ś</sup>* ‘mettre à nu, dépouiller’, Mhr *fata<sup>?</sup>*, *fata<sup>?</sup>*, Jib *fta<sup>ś</sup>* ‘nu’ [LsS: 335].

**431. \*pVt-** ‘feather’: W 4 Paa *pooti* [MS]; C 7 Mofu *-pepét*; 8 Afd

*phti-gge* ‘Feder’ [Sol: 132]; 9 Mbara *pàatà*. Cf. E 6 Mok *púttù-sú* ‘feuille’ (with a suff. of sing.).

Common origin with the next issue can not be excluded:

E **\*pVt-** ‘arm’: 4 Sok *pótu* ‘Arm’ [Luk]; 5a Mabire *pota* [JnH], 5b Jegu *fòtó, pòtó* ‘arm’

//Cf. Eg *hpt* MR ‘umarmen, umfassen’, *hpt* Lit MR, Gr ‘die Arme’ [EG III: 71].

**432. \*pVt-** ‘all’: W 3 Kupto *pát*; C 2 Klb *pàpàtù* [MuK]; 7 Mol *pat* [FsM]; 7a Skn *pat*; 9 Mbara *pét*; 10 Gizey, Masa, Ham, Musey *pét* [LexC], Azum *pet*; E 2 Kaba, Nch *pət* [HmK], Lele *pēd*; 3 Tum *péd*, Ndam *pét*.

**433. \*puHVw-** ‘to fall, to lie down’: W 4 Wrj *piy-*, *piw-*, Mburku, Tsagu *piy-*, Kar *piy-*, Miya *piya* ‘to lie down’ [SkNB], Wrj *p’iy-* ‘to lie down’ [BIS] (*p-* < *Hp-/pH-*); 6 WBade *pàwu* ‘to get down’; C 2 Klb *pwù* ‘to put into’, *pu* ‘to put’ [MuK], Bura *pi* ‘to lie down; to recline’, *pupi* ‘to lie down’, *pwi* ‘to put or place (many things), put down a load, go down’ [BlB], Chb *pùì* ‘setzen, legen’ [HfC]; 5 Pod *pa* ‘to put’, Mlg *púwa* ‘legen’; 6 Buwal *pa* ‘to put’; C 7 Ould *-pùh<sup>w</sup>* ‘tomber d'en haut’, Mada *épe* ‘mettre, poser’, Merey *pà* ‘déposer’; Mofu *-p-* ‘placer, poser’, cf. Ould *pāb* ‘action de tomber’; 8 cf. Makari *pa he* ‘pencher qqch’ [AIM]; E 5a WDng *pàayè* (tr., intr.), Bid *paay* ‘descendre’.

//SCush rift Iraq *púx* idf. ‘sound of smth falling on the ground’ [MKQ], *paah* ‘crumble off, fall down in small bits, drip’ [Kies], Berb Rif *fuḥa* ‘tomber’ [NZ: 544].

**434. \*pVH-** ‘to give birth’: W 4 Wrj *pà-*, Mburku *pù-*, Kar *paay* ‘to give birth’ [SkNB]; C 4 FM *poyi*, FBw *pwe* [Kr], Gude *poo* ‘to give birth’; 7 Ould *pàhóη* ‘donner des fruits’ (pl. in *-n-*).

//Eg *p’p’* Gr ‘gebären, geboren werden’ [EG I: 504].

Cf. [EDE II: 426].

a. W **\*pVwVy-** ‘new’: 2 Goem *pwá* ‘to be new’ [Hlw], Mush *pwoó* ‘novelty’ [JgO], Mpn *púo* ‘new’; 3 ‘new’: Bol *pooyo* [GAB] Maka *poyo*, Ngm (G) *hòoyò* [NEH], Pero *póyò*, Krf *fóoyó* [Stl], Kupto *fòoyò*. Denom. verb in *’a-*: W 3 Kupto *’àppéy* ‘to start (a new day)’.

b. W 2 **\*pVy-** ‘early’: Goem *pyú* ‘very early in the morning’ [Hlw],

Mpn *m̀pà bit* ‘morning, very early when cock crows’ (*bit* ‘morning’).  
 //Sem Sab *fw<sup>ɛ</sup>* ‘beginning’ [Bl: 401], Arab *faw<sup>ɛ</sup>-at-* ‘commencement (du jour ou de la nuit)’, *fay<sup>ɛ</sup>-* ‘commencement (d’une chose)’ [BK II: 646, 664], ECush dull Harso, Dob *payy-* ‘anfangen’, Goll *payy-* ‘beginnen’ [AMS].

**435. \*pVh(Vw)- ‘to break (off, into pieces), destroy’:** W 3 Bol *pòyyu* ‘to break into pieces, shatter’, *piyàayu* ‘to perish, destroy’ [GAB]; C 5 Pod *pəh<sup>w</sup>a* ‘to break off (a limb)’, deriv. *pah<sup>w</sup>a-ca* ‘to break up’; cf. 8 Bud *fō* (< *phw*) ‘piler’ [Awg].

Derived noun ‘flour’: C 1 Gaa *foh<sup>w</sup>à-ta*, Gbn *fu<sup>w</sup>à-tə* (regressive assim. of *p-*) [Kr]; 5 Pod *pəh<sup>w</sup>a*.

//ECush dull Dob, Goll *pah-* ‘zerstören’ [AMS], SCush Bur *puh-*, Alg *puhum-* ‘to pound (grain)’ [Eh: 146].

Not necessarily cognate with the next issue (note related forms in Cush, on the one hand, and in Arabic, on the other).

**436. C \*pVH- ‘to hit, strike’:** C 7 Mbuko *pa* ‘battre’, Muy *pāx* idf. ‘(hitting) lightly’; 8 Bud *fī* (< \**pVh-*) ‘frapper’ [Awg]; 10 Azum *pā* ‘the sound made by hitting smō’, Dari *pīē* ‘frapper’, Musey *po-ra* ‘claquer les mains’ [ShyM].

Derived noun: C 6 Buwal *pox<sup>w</sup>póx<sup>w</sup>* ‘thrashing stick’; 10 Dari *pāpá<sup>?</sup>* ‘fléau’.

//Sem Arab *nfh* ‘frapper avec le pied (chamelle)’ [BK II: 1305].

**437. W \*piya(h)- ‘clay’:** 5 Zaar *vyaa* ‘clay used to build houses’ [CrZ]; 7 DB *piya* ‘clay-pit’, DB *piyà*, Sha *pyà*, Mundat *pya* ‘clay’ [RC], DB *piyah* ‘Lehm’ [JgR].

//Eg *pyp* ‘(Lehm) kneten’ Na [EG I: 502]. For alternative cognates of Eg see [EDE II: 416-418].

**438. \*pVɣ<sup>w</sup>- ‘to split (wood)’:** W 6 WBade *pàgu* ‘split’, deriv. *pàgbu*, *pàbgu* ‘break in pieces’; C 3 Bana *páx<sup>w</sup>á* ‘fendre le bois’ [BlB]; 4 Tsuvan *páhà-n* ‘to split wood’ [BryJ].

//Cf. Eg *ph<sup>ɔ</sup>* ‘spalten, öffnen’ [EDE II: 496].

a. C \***pVɣ<sup>w</sup>- ‘to scratch, tattoo’:** 5 Glv *pɔɣ<sup>w</sup>* ‘to scratch, bruise’; 7 Zlg *pàhá* ‘se cicatriser’, Mbuko *páháy* ‘cicatriser’, *pahay* ‘couper’. Cf. C 7 Mafa *páhác-* ‘ébrécher’.

**439. \*pVγ(Vw)- ‘to accompany, lead’:** W 3 cf. Kupto *fàggé* idf. ‘to go in groups’; C 3 Bana *pxì* ‘accompagner’, HF *bya-*, Kap *byà-ke* (voicing in contact), FG *pxa-ki* ‘to accompany’ [Kr]; 5 Glv *poγ<sup>w</sup>* ‘to lead’, Gdf *pòγà* ‘to accompany’ [KimG].

**440. C \*pVγ- ‘to pour’:** 5-5a Lmn *puγa*, Hdi *pə kai*, Vemgo *mbka*, Dghw *pəkə* ‘to pour’ [HmG], Hitk *pəγ-* ‘eingiessen’; C 7Mafa *páha<sup>a</sup>* ‘couler abondement’, Ould *-pùhw* ‘couler, tomber d’en haut’.

For a possible cognate cf. C 5a Hdi *payá-ku* ‘une femme qui coule du sang’.

//SCush Dah *paah-* ‘to wash’ [TD], Irw *paah* ‘fall down in small bits, drip’ [MMQ].

For C 5 < AA \*pk/Q see [TN № 367].

**441. \*pVγ/hVL- ‘thigh’:** W 2 Ngas *pyaal* ‘the thigh, generally used of cattle’ [Fl], Mghv *pyáyál* ‘thigh’ [BlM], Mush *pyákál* ‘thigh’ [JgO]; 3 Tng *pila*, Glm *pàlà* [SchB]; C 6 Daba *pòhōl*, Kola *páwâl* [JgIb] ‘thigh’

//Sem Akk *paḥallu* OB, Mari, SB ‘thigh’ Sum lw. [CAD p: 20], *paḥallu* ‘Oberschenkel’ [AHw: 810].

[JgIb \*pwl].

**442. \*pag- ‘hide, shelter’:** W 4 Kar *pag<sup>w</sup>a*, Paa, Jimb, Mburku, Tsagu *pu(w)-* ‘to hide’ [SkNB], Miya *puwa*, pl. *pùwa-kə* ‘to hide’.

Derived verb: W 3 Tng *pigde* (< \*pg-t-, complete action) ‘to shield, protect’.

Derived nouns: W 6 GBade *pagà*, WBade *pagán* ‘shelter, shed’; E Tum *pàgá* ‘vannerie pour le toit des maisons’.

//Cf. Eg *pđ.wy* ‘Seitenwände eines Gebäudes’, (?) ‘part of a building’ [EDE II: 546], Sem Akk *napāgu* (MB) ‘to sink, disappear, hide’ (only Inf. attested) [CAD n<sub>1</sub>: 263].

**443. \*[p]Vg- ‘to pluck, remove, tear’:** W 1 Hs *fūgà* ‘to strip heads of g-c for fodder’, *fūgaa* ‘to pluck (feathers, hair); snatch thing from person’; E 3 Tum *pəg* ‘arracher, retirer, enlever’, Ndam *pəgà* ‘enlever, écorcher’.

//ECush Som *fiig* ‘to sweep, remove cataract from eye; peel’, cf. Sem Arab *fgw* II ‘découvrir une chose en ôtant de dessus ce qui la couvrait; ôter, enlever qqch’ [BK II: 546].

The following isogloss (suggested in [TN №365]) might be a remote cognate (cf. Hs ‘to snatch thing from person’):

W 2 Ngas *puk* ‘to take everything away, devastate, esp. in war (includes the burning and destruction of goods and houses)’ [FI].

//Sem Akk *puāgu* OA, MA ‘to take (by force), to appropriate, to control’ [CAD p: 472].

**444. \*pVk- ‘to fall, throw’:** W 2 Mghv *paak* ‘to throw’ [Kr]; C 10 Gizey, Masa, Ham, Gizey, Marba *púk*, Musey *pukka* ‘tomber’ [LexC], Azum *puka* ‘to fall over’, Dari *pík* ‘jeter (petites choses)’, Dzpw *pík* ‘jeter’; E 3 Tum *pòg* ‘abbatre, terrasser (qqn), faire tomber’ (-g- < \*-k- is regular).

//Cf. Sem Arab *ʔfk* ‘renverser, retourner’ [BK II: 40].

For Dari-Tum see [TN №369].

**445. \*pVk- ‘to give birth’** (pl. in -k-, for sg. cf. №434. **\*pVH- ‘to give birth’**): C 9 Mlw *púki*, Mnj *puki*, Mbara *púk* ‘enfanter, accoucher’; 10 Gizey, Masa, Musey *púk* [ShyM], Masa *púk* ‘accoucher’ [CC], Azum *puka* ‘to be born’; E 1 Ndam *piga* ‘pondre (des oeufs)’.

Derived noun: C 4 Gude *pəkə* ‘bloom, sprout’.

Cf. E 5a EDng *piké* ‘éclater, sortir (épi qui devient visible)’.

**446. \*pVk- ‘to shelter, cover, protect’:** W 1 Hs *fàkà* ‘to shelter’; C 6 Mina *pék* ‘to cover a receptacle’ [FrJ], cf. Mghv *puk* ‘to roof’ [BIM].

Derived noun: W 1 Hs *fàkèe* ‘a shelter’; 5 Zul *püike*, Geji *puki* ‘wall of room/compound’ [Cs №172], C 7a Skn *mə-pəkə* ‘vestibule (thatched extension to a room)’.

//Cf. ECush dull Harso, Goll, Gaw *pokkólle* ‘Hauswand’ [AMS].

**447. \*pak- ‘to (lie in) wait’:** W 1 Hs *fàkaa* ‘lie in wait for; listen to person unobserved’; C 5 Mlg *páka* ‘warten’, Glv *pak*, Wnd *páká* [FW] ‘to wait’.

**448. W \*pVk- ‘to end, to die’:** 1 Hs *fàku* ‘to die, disappear from the sight of one’s friends’; 5 Zaar *pok* ‘to finish’ [CrZ].

Derived noun: 4 Wrj *pok-ti* ‘end’ [BIS].

//SCush Irq, Bur, Alg *fak-* ‘to finish’, Asa *fak-* ‘to end’ [Eh: 150], rift \**faak-*: Irq, Gor, Alg, Bur *faak* ‘to finish, to come to an end’ [Kies], E dull Harso, Dob *pakk-* ‘aufhören’ [AMS], Berb Qab *fakk, fukk-* ‘cesser, être fini’, Shawiya *fuk* ‘terminer’ [NZ: 550].

The following isogloss may be cognate:

a. W \**puk-* ‘to empty’: 2 Goem *phuk* ‘to empty the contents of a vessel into another’ (apud [TAS: 291]); 3 Bol *pùkku* ‘to dip out, scoop out’ [GAB], Kupto *fùkkéy* ‘to scoop’.

**449. \**pak-* ‘wing, arm’:** W 1 Hs *fiffikè, fúffúkè, fikàafikii* ‘wing of a bird’; 3 Tng *paka* ‘hand, arm, branch’, Kupto *fáhá*, pl. *fákká* ‘arm, wing, branch’; 4 Miya *pàkə* ‘arm, wing’ [Sch], Wrj *pak-ai*, Kariya *pak*, Paa *puka*, Miya *pakə* ‘arm, wing’ [SkNB]; 5 Tala *pik-par* ‘wing’ [Cs]; C 7 Chuv *pépòek<sup>w</sup>* ‘plume’.

//Berb Ahag *tefâkfak* ‘partie osseuse et charnue de l’aile (aile sans les plumes); aile’, Ghat *tafakfak* ‘aile’ [NZ : 550]. < Ch ?

**450. \**pak-* ‘cheek, temple, side (of face)’:** W 2 Mghv *kə-pák* ‘cheek, side of face’ [JgS, BLM], Mpn *kə-pák* ‘cheek’; C 2 Bura *puk-um* ‘cheek’ [BIB]; 5a Htlk *pág-ám* ‘Schlafe, temple’ [LkH]. Cf. C 6 Buwal *pak* ‘to put to one side’. Note *k-* and *-m-* as affixes of body-parts.

**451. \**pak/k-* ‘to lift, rise’:** C 4 Gude *paka* ‘to lift up edge of smth’; 5 Pod *paká* ‘to lift up smth flat’; 6 Daba *pàk* ‘suspendre’; E 5a Bid *pak* ‘ressusciter’; 5b Tob *pógé* ‘soulever’.

//Sem Geez *fwq* ‘jump up, go up, boil over’, Arab *fwq* ‘surpass’, *fawqu* ‘up(stairs), on top’ [LsG: 172].

**452. \**puk/k-* ‘to collect’:** W 2 Goem *puk* (intr.) ‘to collect into mass’ [Hlw]; C 7a Skn *pəka, puka* ‘to collect’. Cf. 9a Gdr *pák* ‘all’ [FrG].

Deriv. in *-t-*: W 3 Bade *pàk<sup>w</sup>-tu* ‘to join’.

//Cf. Eg Copt *pōōk* ‘sammeln ; tragen’ [EDE II: 432].

**453. \**pVk/kVw-* ‘to peel, strip off, pinch’:** W 2 Ngas *pok* ‘to peel, skin’ [Fl, JgN]; 3 Bol *poku* ‘to peel, strip off’ [GAB]; 6 (partial redupl.) Ngz *pàpkú* ‘to scrape off, shave’; C 6 Daba *pèpèk* ‘enlever la peau d’arachide’; 7 Mofu *-pək<sup>w</sup>-* ‘enlever (un bonnet), décherber (à la houe),

arracher', Muy *ápàk<sup>w</sup>āy* 'to tear open'; 9 Mlw *piki*, Mnj *piki* 'pincer'; 10 Dzpw *pók* 'pincer', Dari *pōk* 'pincer, couper qqch de mou', Musey *pekka* 'pincer; ôter, élever; couper une petit morceau' [ShyM], Peve *pok* 'to pinch off' [Vn]; E 5a WDng *pòkkiyè* 'décapsuler'.

Derived noun: W 3 Pero *pékúró* 'husk'; E 6 Mok *pákìr-tè* 'écorce' (pl. in *-r-*), C 7 Mofu *to-pok<sup>w</sup>* 'glume de mil', Ould *pákà-pákàw* 'écorce du tronc, arraché à un bananier, palmier'.

Cf. C 10 Dari *pōk-sód* ('pincer + dirt') 'charognard'.

//Sem Aram (Syr) *pq<sup>?</sup>* 'to peel, shell, hull', Arab *fq<sup>?</sup>* II stem 'crever, s'ouvrir (se dit de la capsule, de l'enveloppe du fruit dans certaines plantes)', *faq<sup>?</sup>*- 'membrane qui enveloppe la tête du foetus' [BK II: 617]; Omot Wolt *fokk'*, Gamo *pokk'*- 'to peel' [LmW], Wolt *fokuw*, Dache *fok'o*, Gamu *poko* 'bark' [LmW: 351f], EWometo, C'ara *pok'o* 'bark' [BndO : 54], SCush Qwadza *pa<sup>?</sup>uko*, Dah *páko* 'bark' [Eh: 143].

[AA 1 N<sup>o</sup>16 \**pVk* 'to peel, scratch': Sem+Ngas, Kera; for Pero-Mok see TN N<sup>o</sup>426].

The following isogloss seems cognate:

**a. \**pVK-* 'to harvest and peel cotton':** W 2 Ngas *puk* 'to harvest cotton', *puk* 'cotton, cleaned from seeds' [F1], *puk* 'to pick cotton, separate from seeds' [JgN]; E 1 Kera *póké* 'éplucher, récolter la cotton'

**454. \**pVk/k-* 'to pour':** W 3 Tng *puke* 'to water'; C 4 Bch *puke* 'to pour' [SkNB], Gude *pəkə* 'to put or place by pouring'; 7 Mbuko *pāk*, *pākay* 'verser'; 9 Mnj *puki* 'verser'; E 1 Kera *púki* 'vergiessen'; 5a WDng *pàkè* 'verser à grande eau', EDng *pàkē* 'verser un liquid'; 5b Jegu *pak-* 'herabfallen (Regen)'.  
Cf. W 7 Monguna *pok*, Mundat *apók* 'seasonal river' [RC].

//Sem Ug *npk* 'Quelle' [Ais: 210], Ug *ápq* 'spring, source', Hbr *pyq* 'stream-bed' [Ais: 32, DUL: 87], Berb NIG *effek* 'verser', Awj *effok*, *ffok* 'verser, couler' [NZ: 551].

**455. \**pa[k]-* 'to pound':** W 2 Goem *pák* 'pound in a mortar (smth that is moist)', *pyàk* 'step on, crush smth (with foot)' [Hlw]; Note, that Goemai *p-* rather results from a shift of emphasis: \**pVk* > *pVk*.

a. Deriv.: 'to break (off, down): C 7 Muy *ápòk<sup>w</sup>āy* 'to break off (wood) at the join'; 2 Bura *pukta* 'to raze, break down/apart'.

//Sem Geez *faq<sup>a</sup>* 'split asunder, shatter, break through, split head,

wound’, Sem *fqʿ* ‘to split’ [LsG: 163]. ECush dull Goll *paq-* ‘zerbrechen’, Dob, Goll *paq-* ‘zersplittern’ (intr.) [AMS].

**456. \*pas- ‘to dig, bury’:** W 4 Paa *pisù* [MS], Miya *pəsə*, pl. *pàsa-ke* ‘to bury’ [Sch], Wrj *pəš-* ‘to bury, fill a hole up (as when covering a grave)’ [BIS, SkNB] C 5 Wnd *pásá* ‘to dig’ [FW]; 6 Buwal *m̀pàs* ‘to bury’, Mina *pàs-* ‘to cover with soil’ [FrJ], cf. Daba *pās* ‘biner’; 7 Zlg *pásá* ‘déterrer en grattant’, Mofu *-pəš-* ‘enterrer, boucher un trou’, cf. Cuv *mé-pšéhèy* (pl.?) ‘enterrer, boucher un trou’; 8 Makari *fasi ho* ‘déterrer’ (regressive assim. of *p-*) [AIM].

Deriv. in *-k-*: W 1 Hs *fáskà* ‘to dig (ground)’ (but cf. W 4 Miya *pàsa-ke* pl. in *-k-*).

Note E 2 Lele *pāsīlī* ‘creuser dans un endroit dur’.

//Sem Geez *fhs* ‘to dig, examine, scrutinize carefully’ [LsG: 157].

The following forms may be cognate:

a. W \**pVs-* ‘to dip out’: 3 Bol *paašī* ‘scooping water to expose fish’ [GAB]; 6 Duw *əpso* ‘to dip out’.

**457. \*pas- ‘to comb hair’:** W 1 Hs *fīšīi* ‘putting tidy or tittivating woman's hair’; 2 Ngas *pes* ‘to remove, comb’ [JgN], Mpn *pāas* ‘to comb hair’, Mghv *pāas* ‘to comb, clean’ [BIM], Kofyar *paas* ‘to comb hair’, Goem *paas* ‘to clear (a horse's tail from dirt)’ (apud [TAS: 282]); C 7 Muy *ápàsāy* ‘to comb’<sup>49</sup>. Cf. W 3 Bol *pišordi* ‘a comb’ [GAB].

The following root is cognate:

a. C 7 \**pas-* ‘to detach’: 3 Bana *pásá* ‘décortiquer, déplucher, peler’; 7 Mada *áppas* ‘déliér, détacher, découdre, défaire’, Mol *pasay* ‘to detach’ [FrM]. Cf. B 2 Bura *psi* ‘to acquit, release, let go’.

Deriv. in *-k-*: C 7 Mol *pəsakay* [FsM], Mbuko *pésak* ‘détacher’, Mofu *-pəsk-* ‘détacher, défaire, découdre’, Gis *psak* ‘to unfold (mat)’.

//Berb Shilh *fsu* ‘carder’, Rif *fsu* ‘peigner la laine, le lin’, Morocco dial. *fsu* ‘défaire, étirer, nettoyer (la laine)’, Qab *fsu* ‘défaire, étirer (la laine)’, Shilh *fsi* ‘denouer, détacher, délier’ [NZ: 656, 665].

**458. \*pVs- ‘to sprinlke, drizzle, spit’:** W 4 Wrj *pusi* ‘to spew something out of your mouth, spit something out’ [BIS]; 5 Zaar *paas* ‘to spill’ [CrZ]; C 1 Gaa *pišə* [SkNB: 41]; 2 Bura *pši* (also *pšita*) ‘to

---

<sup>49</sup> Common origin of WCh and Arab *nfs* (< AA \**nfĉ*) was postulated in [AA]. However, CCh data points to AA \**-s-*. Thus, Arabic form is not cognate with Ch.

sprinkle' [BIB]; 3 FK *píší* 'to squirt, spray'; 5 Mlg *páša* 'Wasser sprenkeln; melken', Pod *piše* 'to drizzle, sprinkle'; 7 Mafa *piš-* 'cracher de l'eau, bruiner', Mada *épse* 'asperger, cracher', Mofu *-pəs-* 'cracher dans unealebasse pour la bénir', Zlg *pisé* 'asperger'; 10 Dzpw *pís* 'asperger'; E 4 Mawa *pəso* 'mouillé, humide', Sok *pəso, pézo* 'wet' [Luk]; 5a Mig *písáw* 'cracher'.

Deriv.: C 6 Buwal *pišek* 'to spit out'; 7 Balda *pišet* 'to spit (salive)' [Bry]. Cf. Mghv *pàšpàš* idf. 'sound of splashing water or water coming out of a spring' [BIM].

[Nm *\*pəsə* 'to spew, spray'].

//Cf. Sem Sab *nfs* 'to cause water to spread out', Arab Dat *nfs* 'spread out, flow out' [Bll: 309]. Berb Mzab *fsa* 'répandre, verser', Qab *efsa* 'être répandu, se répandre (liquide)' [NZ: 658]

For root-variants cf. *\*fVs-* 'to sprinkle, make wet', *\*pat-* 'to drizzle, sprinkle', *\*pVz-* 'to spray, sprinkle'.

**459. *\*pVs-* 'to rebel, resist':** W 2 cf. Ngas *pes* 'to instigate' [JgN]; C 7 Zlg *pásá* 'se rebeller'; E 6 Mig *ʔáppisò* 'refuser, résister'.

//Sem Ug *pšʕ* 'rebellion, transgression', Hbr *pšʕ* 'to break with, behave as a criminal', *pšʕ* 'offence, crime' ('to rebel, revolt' [KB: 785]), cf. Syr *pšʕ* 'to behave foolishly' [DUL: 675].

As L. Kogan [Kg: 37] noted, CC may be cognate with Akk *puāšu*, see the next issue.

**460. *\*pVs-* 'anger, irritation; to insult':** W 1 Hausa *fúšii* 'anger, exasperation', *fúsaatà* 'become angry'; C 7 Mada *ápsàwà* 'mépriser, déshonorer'; E 2 Lele *pōsí* 'insulter'.

//Sem Akk *puāšu* etwa 'sich ärgern', D 'schimpfen'? [AHw: 875], *pištu* 'insult' n. [CAD p: 433].

**461. *\*pVs-* 'to grow (plants)':** W 2 Goem *pias* 'to start to grow' (apud [TAS: 297]); C 3 Bana *pásá* 'grandir, pousser'; 5 Pod *pásá* 'pousser (tête de mil)'.

//Berb Ntifa *fsu* 'croître, pousser', MC *fsu* 'pousser, végéter', Shilh *fsu* 'épier' [NZ: 656].

**462. *\*pVs-* 'to break':** W 1 Hs *fàsà* 'to break irregularly'; 3 Tng *pas* idf. describing sound of smth breaking; 5 Guus *pas* 'to break, smash (a

pot) [CrG]; C 2 Bura *pwasi* ‘to divide smth hard’ [BIB]; 4 Gude *púší* idf. ‘breaking of falling object’; ECh 3 Tum *pàž* ‘casser’ (all Ch sibilants and sibilant affricates yield -ž# in Tumak); 5a WDng *pèssè* ‘casser avec la main (noix, morceau de sucre)’.

b. W 1 Hs *fáši* ‘the first rough grinding of corn’ E 4 Mawa *pisu* ‘flour’. Alternatively < \*sVp- ‘to pound corn’ (metath.) [CLD III №76].

**463. \*pVs- ‘to blow, breathe; winnow’:** C 7 Mbuko *pasay* ‘respirer’, *ápas-và* ‘se reposer’; 9 Mbara *pìsé* ‘souffler’, cf. Msg *psa* ‘pfeifen’ [LkM]; E 5a Mabire *-pisa* ‘souffler’ [HuJ], Mig *pássó* ‘vanner’, EDng *pésé* ‘vanner dans le vent’.

Derived noun: C 7 Mbuko *ápāsáy* ‘esprit’; Muy *ápás* ‘to rest, chat’.

//Sem \*ps ‘to breathe’: Akk *pašú*, Hbr pB *pwš*, etc. [SED I, Vb. 56], Cush Ong *fusaa* ‘to blow’ [FIO].

For a metath. cf. Ch \*sVp- ‘to blow, winnow’ [CLD III №72].

For Mbara – Sem \*ps see [TN №350].

**464. \*pV(HV)s- ‘to disperse, spread’:** W 1 Hs *fásà* ‘to disperse a gathering’; C Pod *pása* ‘to pour (smth powdery)’; 6 Buwal *papas* ‘to spread out bits of’; 7 Mada *ávvasà* (< *avavas* < *apapas-*, compensatory redupl.) ‘être disperser’.

Derived verbs: C 2 Bura *pšari* ‘to spread on the ground’; 6 Daba *pùsūk* ‘éparpiller, répandre’; E 2 Lele *pàsini* ‘disperser’.

//Sem Geez *fhs* ‘to spread out, stretch out’ [LsG: 157], SCush rift Alg *pas-it-* ‘to scatter’ [Eh: 161].

**465. W \*pVs- ‘to sting, shoot’:** W 2 Ngas *pus* ‘to shoot as of an arrow, to sting, it generally connotes the meaning that the arrow has hit the mark’, *pwás* ‘to shoot, but generally used of many shootings’ [Fl], *pus*, pl. *pwás* ‘to shoot, to nail’ [JgN], Mghv *pùs*, pl. *pwás* ‘to shoot, to arrow; kick, butt (animal); to nail smth in’ [BIM], Mpn *pùs* ‘to throw spear, shoot arrows; kick’, Mush *pús* ‘to throw, shoot’, pl. *pwás* ‘to throw’ [JgO], Chip *pus gwe* ‘shoot’ [Kr]; 5 Tala *fíš-*, *fəsi* ‘to shoot’ [Cs].

For external cognates of W 2 see [TN №351].

a. \*pVs- ‘sting, arrow’: W 1 Hs *fàasaa* ‘broad arrow with long barbs’; 2 Mghv *pas* [BIM], Mpn *pās* ‘arrow’, Ngas *pas* ‘arrow, needle’ [JgN], Mush *pas* ‘traditional needle, arrow’ [JgO]; 3 ‘arrow’: Bol *poččo* Krkr

*fàs-ku* [GK], Pero *púžù-k*, Bele *fóččó*, Ngm *hò'òčò*, Krf *fúší*, Glm *pàší*, [SchV], Maka *póččó* [SvP]; 5 Grnt *pəši* [Ja], Saya *piis*, Jimi *fusko* (< Krkr?), Plc *pyas*, Saya *piis*, Zul *pəse* 'arrow' [Cs №105], Zaar *pi:s* 'sting, arrowhead' [CrZ], Dott *pəs* 'quill, sting; arrow;awl' [CrD]; 7 Karfa *ak-pas* 'iron arrow', Fyer *fwaš* 'arrow' [RC]; C 5a cf. Hdi *pusa* 'clou, nail' ('a sharp point').

[Cf. ISv: 25 – Bol, Ngas, Krkr forms].

**466. C \*pVs- 'to drop'**: 2 Bura *psi-ta* 'drop smth', *psi-wa* 'to drop smth into smth' [BIB]; 7 Mbuko *pépas* 'tomber à terre (toit, miettes)' (< \*HVpVs, compensatory redupl.), Zlg *pèspèsís* 'tomber'.

//Sem Arab *ʿfs* 'terrasser et traîner par terre' [BK II: 299].

For Arabic 'traîner par terre' cf. the following isogloss:

a. W 6 **\*pas-** 'to drag on the ground': Duw *pàaso*, WBade *pàasu*.

For a derived noun cf. C 9 Mnj *pus-pus* 'charrette à bras'; 10 Musey *pupus-na* 'la charrette'.

**467. \*pus/c- 'to wash'**: W 3 Bol *pùušu* 'to wash (thing)' [GAB], Ngm (G) *hùušâ* 'to wash' [NEH]; 5 Zar *pes* idf. 'to wash' [CrZ]; 6 WBade *àpsu* 'to bathe'; C 3 Bana *pšì* 'laver'; 7 Gis *pus* 'waschen'.

For a root variant see №484 **\*pič-** 'to wash, to clean'.

**468. \*pVHV/c- > pVpVs-** (compensatory redupl.) 'to render into small pieces': W 6 Ngz *pəpsú* 'to render into small pieces or powder'; C 7 Mofu *-pápəs-* (compensatory reduplication) 'émietter, distribuer en petites bouchées, diviser la boule en petits morceaux'.

Derived nouns: a. C 5 Glv *pášpàša* 'crumbs, broken pieces'; 7 Muy *piš-piš* 'crumbs', Ould *péspès* 'petit morceau'.

//Sem *\*pħc*: Arab *ʿħs* 'broyer, frotter dans la main' [BK II: 547], PbHbr *pāħas* 'smash, beat out of shape, dissolve by rubbing' [LsG: 157].

Root extension (*ħ* as C<sub>2</sub>) in Sem. On the other hand, partial redupl. (*pVpVs*) may be taken for 'compensatory reduplication': C<sub>1</sub>HC<sub>2</sub> > C<sub>1</sub>C<sub>1</sub>C<sub>2</sub>.

Alternatively Ch forms may stem from №462. **\*pVs-** 'to break':

For a 'root variant' cf. C 6 Daba *pās* 'détruire', *pàsēr* 'détruire, démolir' and Sem Akk *pasāsu* 'to break, to cancel' Oakk on [CAD p: 218] < AA *\*pcc* 'to break, to destroy'.

**469. \*pVs/c/ç-** ‘to spin’: W 2 Ngas *pus* ‘to spin cotton’ [JgN]; E 1 cf. Ndam *pásá* ‘coudre’.

Derived noun: **\*pVS-** ‘rope’: W 2 Ngas *pus* ‘rough string’ [Fl], Mpn *pùs* ‘tissue of plants used in rope-making’, Mghv *pìs-yáa* ‘yute, fibre’, *pìzèp* (< *pìs-p*, pl. in *-p*) ‘fibre from maize cob’ [BIM]; E 1 Kera *pesi* ‘belt for a female loincloth’.

//Sem Geez *fhs* ‘spin (thread), twist’, *fəhso* ‘thread’, Mhr *fhās*, Tgr *fahasa* ‘twist’ [LsG:157].

Alternatively, W-ECh may be cognate with C 5a Hdi *paca-paca* ‘woven cord used to protect young girl's genitals’, all < Ch **\*pVç-**.

**470. \*pVs/c-** ‘hand’: E 5a Bid *pésè* ‘main, bras’, Mig *píssi* ‘main, bras, doigt’; WDng *pìsè* ‘hand, arm’, *pòosà* ‘patte avant d'un animal’, EDng *pósíj* ‘la main, le bras’; 5b Mubi *fósó* ‘hand, arm’ [Luk], *fòósó* ‘main’ [JgM], Kaj *fòoso*, pl. *fàs* ‘main’.

For a denom. verb cf. C 9a Gdr *ps-* ‘to give’ [FrG].

//Sem Aram (Bibl) *pas-*, (Jud) *pis-t-*, (Mand) *pas-* ‘palm of a hand’ (< Afras **\*pVc-**). Cf. Berb *\*afus, fus* ‘main, bras’ [NZ: 653-5]. According to A. Militarev, Berb *\*s* follows only AA sibilants (*\*s, \*š*). If so, Berb and Aram forms can not follow one and the same proto-form. Ch and Aram may stem from AA **\*pVc-**, while Ch and Berb - from AA *\*ps*. To put them all together, we need to assume that Berber *\*s* may follow AA *\*c*. Cf. [AA 1 №12 **\*pVš**, var. **\*pVs**, ‘hand’].

**471. \*pVz-** ‘to spray, sprinkle’: W 6 Ngz *bàziyú* (regress. voicing) ‘to spray water from mouth’, WBade *pàzwu* ‘to spray’; C 7 Muy *épižēy* ‘to sprinkle with the mouth’; E 6 Mok *pàzà* ‘(re)cracher, asperger le corps d'un nouveau-né’.

**a. \*puz-** ‘rainy season’: W 2 Ngas, Mnt, Chip *pas* [JgC, JgN], Mpn, Goem *pas* [Fp], Goem *p'às* [Hlw], Mwgh *pas, tar-pas* [BIM], Mushere *pàs* [JgO] ‘rainy season’ (pl. in internal *-a-*, cf. [TAS: 299]), Mpn *tù-pūš* ‘tiny rain, heavy mist’; 3 Bol *puzò* ‘rainy season, rust’ [Bn, GAB], Ngm *hùzò*, Krkr *fəzò* ‘rainy season’ [SchV].

//Cf. Sem Arab *fzz (i)* ‘saigner ou suppurer (se dit d'une plaie)’ [BK II: 589], Cush agaw Kemant *fäz-* ‘to flow’ [ApAg].

**472. \*pVz-** ‘to disperse, spread’: C 3 FK *pəzə* ‘to spread’; C 8 Bud *phažii* ‘sich zerstreuen (Leute)’ [LkBd]; E 5a WDng *pàzziyè* ‘se

répendre, s'éparpiller (chèvres...)'.

//Berb EWLmd *feziwek* 'se disperser en désordre', Mzab *fezze* 'éparpiller, disperser' [NZ: 688].

The next root may be cognate with the present one.

**473. \*pVz-** 'to smear, scrape': C 5 Pod *pižé* 'to rub; frotter'; 6 Daba *pàz* 'oindre le corps'; 7 Mafa *páz-* 'cultiver (à la houe), gratter (la terre), se gratter'.

Note W 1 Hs *fázàyii* 'any clear space' ('scraped, cleaned'?).

//Sem Geez *fwz* 'wipe off, efface, rub the back, sweep, clean by rubbing', Tna *fawāzā* 'scrape' [LsG: 172f].

For a 'root variant' cf.:

**W \*pVwVs-** 'to smear, rub, clean': 2 Mghv *pwos* 'to rub' [BIM], Ngas *pwās, pwīs* 'to smear, anoint' [F1], *pos* 'to rub on' [JgN], Mpn *pwās, pwēs* 'to rub (ointment)', Mush *poos* 'to rub, clean' [JgO]; 5 Grnt *pòōši* 'to wipe, rub' [Hr].

//Sem Akk *pašāšu* from OA, OB on 'to smear, anoint' [CAD p: 245] 'salben, einreiben' [AHw: 843].

**474. \*paç-** 'to catch, take': W 1 Hs *fátsà* 'catching fish by hook and line; fish-hook'; C 6 Mina *pàts-* 'to take' [MGr].

//Sem Akk *\*pu'ušu* NA 'to appropriate, embezzle' [CAD p: 555].

**475. \*p[a]ç-** 'to unload, put': W 4 Wrj, Kariya *pàts-* 'to descend, unload' [SkNB], Wrj *pàts-* 'to bring down, unload' [BIS]; C 6 Mina *pac* 'to put' [FrJ].

//Cf. Sem Arab *ħfš* 'jeter qqch, lancer' [BK I: 459]. For an alternative cognate of W 4 see [TN №348].

**476. \*pVç-** 'to tear, pluck': W 1 Hs *féetsè* 'to remove loose 'leaves' from reeds to be used in making mats or string'; C 5 Gdf *pìcà* 'to pluck' [KimG]; 6 Daba *pāč* 'arracher avec les racines'; 7 Mafa *puc-* 'arracher (plant, arbre), déraciner', Muy *ápác* [ts] 'to weed', *ápàcāy* 'remove'. //Sem Arab *fšš* 'tirer, extraire une chose d'une autre et l'en séparer' [BK II: 598].

**477. \*pVç-** 'to roast, burn': Ç 2 Bura *pca* 'to roast, bake', *pca-maya* 'to roast it all' [BIB], MrgC, Mrg [HfM: 29] *pca* 'to roast',

Ngwahi *cə*, Hildi *ca* [Kr]; 3 HK *psa-* HB *pceyo*, FK *wča* ‘to roast’ [Kr], Bana *psá* ‘griller dans le feu’, *pásá* ‘griller beaucoup de choses’; 5 Mlg *páša* ‘verbrennen, rösten’, Wnd *pša* ‘to roast, to burn’ [Jglb]; 9a Gdr *pse* ‘to grill’ [FrG].

Derived noun: **\*puç-r/n-** ‘ash’: W 4 Tsagu *pūsə-n* (shift of emphatization), Siri *vəcə-ki* [SkNB]; C 1 Tera *pəži-t* [NmT], cf. Gaa *fiža* Gbn *fiče*, Boka *fūši* (regressive assim. of *p-*) [Kr]; 2 Bura *pinžu* [BIB], Ngwahi *pinžu* ‘ashes’, Chb *pinzú* (metath. and voicing in contact), Mrg *punsu-dú*, Klb *púcirú* [Kr]; 3 Bana *psá-r*; 7 Balda *púćú* [Bry].

For CCh 1-2 < *\*pnZ* see [TN №407].

//Cf. Eg *wps* ‘(der Bösen) verbrennen’ NR, *wps.t* ‘eine Göttin, welche die Bösen verbrennt’ Sp, Gr [EG I: 305].

**478. C \*paç-** ‘to cut through, off’: 4 Gude *pacə* ‘to chop through with one blow’; 7 Ould *pac* idf. ‘action de couper qqch’, Zlg *pac*, Mbuko *poçpoc* ‘couper en abattant’.

//Cf. Cush Sid *faffač* ‘to split (a log into small pieces)’ [KS: 312].

**479. \*pVç/č’-** ‘to germinate, give birth’: W 3 Kupto *péešə* ‘germinating’; C 2 Bura *pca* (ts) ‘to sprout’; 7 Mofu *-pəč-* ‘germer, pousser’, Chuv *mépčəy* ‘germer’, Muy *pəčūk*<sup>w</sup> idf. ‘giving birth’; E 2 Lele *pōsī* ‘engendrer beaucoup, se multiplier abondamment’. Cf. C 5 Pod *pəcəcə* idf. ‘plante toute petite qui vient de sortir’.

For a root-variant cf. №461. **\*pVs-** ‘to grow (plants)’.

**480. \*pVç-** ( or **\*pVHVç-**) ‘sun(shine), day’: W 2 Ngas *pus*, *puus* ‘sun, daylight’ [Fl], Mpn *pūus* ‘sun’, Mghv *puus* ‘sun, day’, Mnt *pəγəs*, Grk *p<sup>w</sup>əγəs* [JgC], Mush *puus* [JgO] ‘sun’, Goem *p’ú:s* ‘sun, time’ [Hlw]; C 2 Bura *pči* ‘sun, daytime’, *ti-pči* ‘noon, daytime as contrasted with night’ [BIB], Mrg *biči*, Wmd *piči*, Hld *pučī*, Ngwahi *čì čì* (< *pči*), WM *bijì* [Kr], Klb *piči* ‘sun’, *pùči* ‘during the dry season’ [MuK]; 6 Buwal *pèš*, Daba *pīč*, Mina *pič* [FrJ], Mbedam *pīss* ‘sun’ [LMb]; 7 Gis *pas* ‘Sonne’, *papas* ‘Tag’, *ta-pas* ‘Sonnenehitze, Tageslicht’, Mbuko *pac*, Chuv *pás*, Balda *pas* ‘soleil’ [Bry], Mofu *pás* ‘soleil, jour’, Mafa *pac* ‘soleil, jour, lumière’, Vame *pas* ‘sun’; 7a Skn *pis* [pith or bis] ‘sun’ [DSk], *pis* ‘sun, day’ [ThS: 23]; E 4 Mawa *puusi* ‘chaleur’, cf. Sok *píoo* ‘Sonne’ [Luk].

Deriv. in *-r-* (pl.?): W 1 Hs *fátsàr-fátsàr* ‘noonday heat of the sun’; 6 Duw *puusara* ‘dry season’.

Consider W 2 Mnt *pəγəs*, Grk *p<sup>w</sup>əγəs* as forms in internal *-k-* pl. Alternatively, these (and other) forms could derive from Ch *\*pVHVç-*. //Cf. Sem Arab *fšh* ‘briller de loin et paraître blanc’ > ‘aurore’ [BK II: 605].

Cf. [GrR] CCh *\*pitsi* ‘sun’, including Proto-Bata, Lmn and other forms of the *\*f-t-* structure. For the latter see №324\*(*ʔa*)*fVti* ‘sun’.

**481. \*pVç-** ‘white; light (colored)’: W Hausa *fátsíi* ‘a lightish-skinned coloured person’; E 5a WDng *pàs-pàs* ‘entièrement blanc, couvert de terre’, EDng *púsísày* ‘gris’.

//Sem Akk *pešû* OAKk on ‘white, pale, bleached’, *pešû* ‘to become white; to pale’ [CAD p: 328-334], *pešû* I ‘weiss, hell(grau) (Wolle, Stoffen, Tieren, Fellen, Menschen (Haut oder Haar?)), *pūšu* (Bab) ‘das Weisse, weisse Fleck’, *pušû* (OA, OB) ‘Weisses’ [AHw: 857, 883], note Sab *fšy* (if it really means ‘white’) and discussion in [Bll: 407]. Note Cush agaw Aungi *fúččí* ‘white’ [ApAg].

**482. \*pu/ič-** ‘to spit’: W 3 Krf *fiš-*, Glm *pàs-àalá*, Gera *fiiši-mí* [SchB], Bure *pis-*, Pero *píužò*; 4 Paa *pìsìuu*, Diri *pəža*, Jmb *fəš-*, Kar *pəcə*, Tsagu *pəč-* [SkNB]; 5 Bogh *pyas*, Grnt *pasi* [Cs], Zaar *pyaacə* (< *pyaacə*) [CrZ], Buli *pisən*, Dott *pes*, *pyas* [Cs №751]; E 4 Saba *pise*, Mawa *pičij* ‘to spit’, cf. Ubi *pižij* ‘to spit’, *pécò* ‘humid’; E 5a Mabire *pačawa* [HuJ], EDng *pičē*, WDng *pičè*, Bid *pič*; 5b Kaj *fáčú*. Cf. E 4 Ubi *pačyo* ‘dew’ [HuJ].

Reflexes of *-č-* are not quite regular in W 4. It is possible, that reflexes of *\*pu/ič-* ‘to spit’ and *\*pVs-* ‘to sprinlke, drizzle, spit’ conflated in some of W 4 languages.

//Sem Ug *wpt* ‘to spit’, cf. Hbr *tpt* ‘spittle’, Akk *wapāšu* OB ‘to insult’ [DUL: 929f], Arab *nft* (*i, u*) ‘vomir cracher, jeter dehors la salive’ [BK II: 1304]. Cf. Berb Ntifa *sufs*, Izn *siuffes*, Snus, Ghad *sufes ssufes* ‘cracher’ [NZ: 659].

[JgIb *\*pš* ‘spit’, AA 1 №10: Sem, WCh 3, Berb].

**483. \*pVč-** ‘to be full; to swell’: W 4 Wtj *pəč-*, Paa *puču*, Diri *fəču* ‘to swell’ [SkNB], Paa *pičùu* ‘to swell, puff up’ [MS]; C 7 Mbuko *pečepeče* ‘plein à déborder’.

//E Cush Arb *patfa*, Tsam *hotfi* ‘full’ [ATO], *pačč* ‘full thing’ [Hay],  
**a. \*pVč-** ‘many’: W 1 Hs *fáčáa-fàčàa* ‘in large quantities’; C 2 Bura  
*piči-ku* ‘of great quantity’;  
 Sem Arab *mafatt-at-* (*ftt*) ‘multitude, abundance’ [BK II: 542].  
 These fragmentary attested isoglosses may follow one AA root (\**pč(č)*  
 ‘to be full, abundant’).

**484. \*pič-** ‘to wash, to clean’: W 3 Krf *fěčči* ‘clean, cleaned’ [SchB];  
 C 2 MrgC *pčipčô* ‘washed clean’, *pčinà* ‘to wash’, Mrg *pču* ‘to wash,  
 to be cleaned’ [HfM: 29]; E 1 Ngam *piče* ‘blanchir, laver (une chose)’,  
 Mobu *péžé* pl. ‘laver qch’; E 5a Bid *pič* ‘administrer un clystère  
 (lavement)’, Mig *páčáw* ‘s’éclaircir (ciel)’ (a modified vowel in  
 Reflexive). Cf. WDng *pač pač* idf. de *ače* ‘laver’.  
 Deriv. ‘white (spot): W 1 Hs *fáači, fyáči* ‘a blaze down the whole face  
 of a horse’; 4 Tsagu *paačahan* ‘white’, cf. Siri *mbiicanni* ‘whiteness’  
 [SkNB] (it is not clear, if *mb-* < \**mp-* would be regular).

**485. \*pič'-r-** (-r- pl.) ‘urine’: W 1 Hs *fítsáarii*; 4 (metath.) Wrj *cəpr-  
 ái*, Kar *cipír*, Diri *ácəbəlá*, Miya *cəpúr*, Siri *č’ipári* [SkNB], Wrj  
*cipurai* [BLS], Paa *cipurá* [MS]; 5 \**6Vs(Vr)-* < \**pič'-r-* (shift of  
 empfatization): Bogh *bés*, Buli *bas*, Dott *busaari*, Geji *bási* Guus *bižá*,  
 Zaar *bes* [Cs №96]; C 10 Dari *zəbūr*, Dzpw *zùbūr* [Sa], *čubùr* [JgIb]  
 (< \**čVpVr*, voicing of -p-, metath. < \**pVč’Vr-*); E 1 Kwn *kó-čor* (< \**k-  
 čwr* < \**k-čpVr*, *k-* is a pref. of coll. nouns) [JgIb]; 2 Kaba *čəbàrá*, Lele  
*čóòró* (< \**čVpVr-*, metath. < \**pVč’Vr-*) [JgIb], Nch *čəbrə* [HmK]; 3 Tum  
*bāžár*, Ndam *būž* (< \**PVCVr-*, regular voicing) [JgIb]; 4 Mawa *swari*,  
 Ubi *čario* (< *čVwVr* < *čVpar*); 5a Mabire *čora* (< \**čpar-*, metath. and  
 lenition of -p-) ‘urine’ [HuJ], \**pidý-* (< Ch \**pVč’-*): EDng *pidýé*  
 ‘uriner’, *pidýí* coll. ‘urine, sperme’, Mig *pidýi*, Bid *pi’i* coll. ‘urine’,  
*pi’aw* ‘uriner’; 5b Brg *fidýi*, Mubi *fàràdyé* (metath.) ‘urine’ [JgIb].  
 For a denom. verb cf. W 3 Tng *sipe* ‘to urinate’. Note *p-č’* > *č’-p* in  
 Chadic languages - in accordance with the law of "rising sonority".  
 //Sem Arab *fazz-* ‘horse urine or water from the stomach of a ruminant’  
 [BK II: 613]. Berb Ahag *tafezza* ‘urine’, Air *tafezze*, Ghat *čifezza* ‘urine  
 de chameau’ < Arab [NZ: 689]. Note ECush Oromo *finč’an* ‘urine’  
 [Grg], SCush Irq *pitsah* ‘collected cow’s urine for softing lather’  
 [MKQ].  
 [JgIb \**pšr*, AA 1 №11 (Arabic, some W and ECh forms)].

**486. W \*p[i]ʒ- ‘bran’:** 2 Goem *p’is* [Hlw]; 6 Bade *pəʒí*, Ngz *bəʒí* ‘bran’ (regular voicing by assim. with the medial consonant).  
For a derived verb cf. Cf. 2 Mush *pus* ‘to separate chaff from grain by using calabash’ (apud [TAS: 294]).

**487. \*pat- ‘to drizzle, sprinkle’:** W 3 Pero *páaʒó* ‘to sprinkle’, Krkr *faasò* ‘flowing’ [GK]; C 6 Buwal *pat* ‘to pour libation’; 7 Mbuko *patáy*, Zlg *pat* ‘asperger avec une calabasse’, Muy *pàtà* idf. ‘splashing’, Mofu *-pát-* ‘verser à terre (un liquide en libation), asperger’  
//Sem Arab *hfš* ‘verser, donner (de l’eau) en quantité’ [BK II: 458].  
Root extension (*h-* as C<sub>1</sub>) in Arabic.

**488. \*(HV)pVt- ‘to peel, pluck’:** W 2 Ngas *pès* ‘to pluck feathers’ [JgN]; C 4 Gude *pità* ‘to pluck seeds from plant one by one’; 5 Pod *pata* ‘to peel off, crack off, décortiquer, arracher’; 6 Buwal *pa-pat* (compensatory redupl.) ‘to shell peanuts’; 7 Mada *ápat* ‘décortiquer, écosser, écorcher’, Mafa *papat-* (compensatory redupl.) ‘prendre peu à peu tous des biens de qqn, dépouiller’, Muy *ápàtāy* ‘to shell (peanuts)’; 10 Dzpw *pút* ‘écorcher un arbre coupé’.  
Derived noun: **\*pVt- ‘bark’:** C Daba *pàpát* ‘l’écorce’; 7 Mada *pataf* ‘coque, écorce’, cf. Zlg *patáa-ngwad* ‘écorce (d’arbre)’  
Deriv. in *-t-* (complete action) : C 7 Mofu *-pát-t-* ‘(se) séparer, retirer (la main de qqch)’; 6 Buwal *pát-et* ‘to peel off layers’.  
Deriv. in *-d-* : C 6 Daba *pàtā-d* ‘éplucher avec les ongles, enlever la peau’; 7 Zlg *pàtā-d* ‘décortiquer’, Mofu *-pátā-d-* ‘écorcher, fendre dans le sens de la longueur (tige)’.  
//Sem Arab *hfš* ‘péler, ôter l’écorce’ [BK I: 458], Geez *ħafaša* ‘rake up, sweep up’ [LsG: 227].

**489. \*pVt- ‘to flatter a woman, to marry’:** W 6 GBade *pàtau* ‘to marry’, *patà*, WBade *pata-n* ‘marriage festival’; C 3 FK *pátá* ‘to pet, love’; 6 Daba *pèt* ‘flatter une femme’.  
//Sem Arab *hfš* (n. d’act. *ħafiša*) ‘témoigner une grande affection à qqn’ [BK I: 458].

**490. \*PVt- ‘to abandon, to refuse’:** W 1 Hs *fáasà* ‘to abandon the idea of doing smth.’; E 5a EDng *póočé* ‘refuser, ne pas vouloir’, Mig *póočó*, WDng *pèècè*, Bid *pòoc*; 5b Brg *fòocí* ‘refuser’.

**491. C \*pVl-** ‘to worship’: 4 Gude *pə̀tə* ‘to worship at pagan shrine or fetish’; 7a Skn *pə̀ta* ‘ceremonial centre’.

/Sem Akk Bogh *upīšu* ‘sorcery, magical machinations, (objects used for magical machinations)’, Bogh *epēšu* (*epūšu*) ‘work, activity; evil magic’ from OB on [CAD u: 179, e: 191].

**492. \*pV[t]-** ‘to break, to smash’: W 3 Krkr *pat* idf. indicates striking a blow [GK]; 4 Paa *pī̀lāa* ‘to break, smash’ [MS], Siri *pə̀tu* (shift of emphatization: \*pVl- > *pə̀tu*), Paa *pī̀ta*, Diri *fə̀tu* (regressive assim. of *p-*) ‘to break’ [SkNB], Miya *pə̀tə* ‘to hit, slap’ [Sch]; C 2 Mrg *pī̀tū* ‘to break in pieces’ [Kr], *pə̀tū* ‘to break (pot, calabash)’ [HfM: 148], MrgC *pə̀təpə̀tə* ‘forged’, Bura *pə̀ta* ‘to break out, crack or smash’ [BLB], Wnd *pī̀təw*, Hildi *pī̀ti-na* ‘to break in pieces’ [Kr]; 3 Bana *pī̀ti* ‘casser, forger’, HN *pī̀tə* ‘to break in pieces’ [Kr]; 4 Gude *pə̀wə̀tə* ‘to break off tree limb’, *pə̀tə́b* ‘squashed, smashed flat’; 5 Glv *pī̀t* ‘to crush, to press, to touch’, 5a Hdi *pə̀təy* ‘to break’; 7 Mafa *pə̀t-* ‘casser, piler’, Mofu *-pə̀t-* ‘détruire, décimer, casser les branches’, Ould *-pə̀təy* ‘se casser, s’écarter’, Mol *pat* ‘to break’ [FsM]; 7a Skn *pə̀ta* ‘to break up, smash to’; 10 Azum *pī̀t* ‘the sound of hitting often’, *put* idf. of ‘breaking’.

Deriv. in *-k-*: C 7 Mofu *-pə̀tk<sup>w</sup>* ‘(se ) casser (bois, outil), casser une partie de qqch’.

Deriv. in *-t-*: W 6 Bade *pə̀t-tu* ‘to press out’.

Derived noun: C 7 Muy *pə̀təy* ‘a piece of broken calabash’, Mada *pałara* ‘tesson, morceau de calabasse’.

//Sem Arab *fə̀d* ‘casser, romper, briser’ [BK II: 644], Hbr *fə̀š* ‘zerbrechen’ [KB: 772], Akk *puššū* SB ‘to crush (?)’ [CAD p: 539]. Cf. Arab *fə̀d* ‘briser, casser’ [BK II: 641].

[JgIb *pə̀t* ‘to break’, AA 1 №45 \**pə̀c* ‘to break, pierce’].

**493. \*pat/t-** ‘to nail’: C 2 Mrg *pə̀tū* ‘to nail’ [HfM]; 5 Wnd *pə̀tə* ‘to nail’ [FW].

Deriv. W 6 Duw *pə̀t-to* ‘to pierce, lance’.

**494. \*pat/t-** ‘flat spot’: W 6 Ngz *pə̀tā* ‘crown of the head’, Duw *pałpə̀t* ‘flat of the hand’; C 4 Gude *pə̀tā* ‘large flat exposed rock’; 7 Mada *pə̀ta-tat* ‘plat et large’.

For a metath. see CLD II №89 \**tVp-* ‘flat stone’.

**495. C 7 \*pVɓ-** ‘to close, cover’: Mafa *píɓ-* ‘fermer’, Zlg *vəɓ* ‘boucher, fermer une couverture’.

Derived noun : W 2 Ngas *péel* ‘mud ceiling’ [JgN]; cf. C 7 Mafa *veɓed* ‘balèvre à l'entrée de la maison’.

**496. \*paz/ɓ-** ‘open space’: W 1 Hs *fázàyii* ‘any clear open space’; C 2 Bura *pwaka* ‘area outside of gate’; 3 FK *peɓai* ‘vergin land’.

**497. \*p[a]l-** ‘to separate’: W 1 cf. Hs *fálán* ‘separately’; C 6 Buwal *pàlax* ‘to take apart’ (pl.?), Daba *pàlà* ‘séparer’; E 5a Mig *páaló* ‘s'écarter’, cf. Mig *pìlɔ̀* ‘séparer (avec difficultés)’ (for -aN- pl. in Ch see [BIP]).

Derived nouns: C 6 Daba *pàlà* ‘la partie’; E 2 Lele *pólú* ‘séparation, frontière’.

Cf. W 6 GBade *pàal-tu* ‘to divide, distribute’; E 5a Bid *palàk* ‘bifurquer’.

For CCh *\*pVl/r-* ‘to untie’ see № 544. *\*(?V)pVr-* ‘to untie, unfold, release’.

//Sem Geez *falaya* ‘separate, divide, distinguish between’, Arab *flw* ‘to wean’, Aram (Mand) *pla*, Jud *ply* ‘be sepatared, distinguished’, *ply* (hif'il) ‘treat as special, distinguish between’, Ug *ply* ‘be sepatared, distinguished’, Tna *fäläyä*, Tgr *fäla* ‘separate’ > Cush Bilin *faley* ‘separate’ [LsG: 161], Berb Ahag *tafult* ‘part’, Wlmd, Ayr *tafult* ‘part, portion d'une chose devisée’, Ghat *tafult* ‘part, portion’ [NZ: 563]. Cf. [AA 1 №38 *\*pl* ‘to cut, separate’].

Consider the next issue as a derivative, note a tenable semantic shift ‘to be separated’ > ‘alone’.

a. *\*pal(l)-* ‘single, alone’: W 1 Hs *fállé* ‘a single one’; 3 Bol *palpal* ‘one each, one at a time’; 6 WBade *palla* idf. indicates exactly one; C 2 Bura *pal* ‘one’ [BIB]; 5-5a Chn *pala* [Kim], Wnd *pälle* [JgIb], Glv *pal*, *pállá* ‘one’, Mlg *pälle* ‘eins, allein’; 6 Buwal *pal* ‘to be alone’; 7 Mofu *pál* ‘one’ (num. en syntagme, *ted* ‘un’, en comptant [BaMo]), Gis *pal* ‘eins’; 8 Makari *pal* ‘one’ [AIL].

According to [JgIb I: 131], Wandala, Glavda, Mofu and Gisiga forms “are loanwords from Kanuri *fal* ‘one’”. However, relevant cognates, given above contradict to this statement. Note also that replacing of Kanuri *f-* by *p-* in loaned forms would be anomalous.

Some more forms may be cognate: *\*pVl-* ‘to be few, lack’: C 5 Glv *pil*

‘to be deficient, lack, cannot’; E 5 Mabire *pali* ‘peu’ [HuJ]. Derived verb: W 6 WBade *pə̀liu-tu* ‘to reduce’.

**498. \*pal-** ‘to fall’: W 2 Ngas *pal* ‘to stumble and fall’ [FI], Mghw *pal* ‘to fall > to fail economically’ [BIM], Mpn *pál*, Chip, Mush *pal* ‘to fall’ [JgC, JgO]; Note C 10 Azum *plu-mba, plu-ta* ‘to be down-graded (from a high position to a lower one)’.

a. \**p[ajl]-* ‘to lie down’: W 2 Ngas *paal* ‘to lie down’ [FI]; C 3 FK *mpə̀lá-bá* idf. describes how so. lies down to sleep stretched out’; 7 Chuv *mépə̀lèhèy* ‘s’allonger’. For confusion of semantics ‘to fall’ and ‘to lay down, stretch o.s.’ see Hebrew.

Derived noun: \**paal-* ‘bed, sleeping mat’: W 2 Mpn, Mush *pàal* ‘bamboo bed’ [JgM], Ngas *pal* ‘a bed made of strips of a palm, bored and threaded together, it serves as a solid mat to sleep on’ [FI], Mghv *pàal* ‘mat from ruffia branches’ [BIM], Goem *páal* ‘stem of the raffia palm branches’ [Hlw]; E 4 Barein (dial.) *páalè, páalé* ‘bed’.

For W 2 ‘bed, mat’ & SCush \**paʼal-* wood’ see [TN №394].

//Sem Hbr *npl* ‘to fall, lay down, prostrate’ [KB: 264f], Ug, Aram *npl* ‘to fall’ [DUL: 626] Akk *napālu* ‘to fall’ < WSem [CAD n<sub>1</sub>: 277], Cush Sid *ofoll-* ‘to sit down’ [KS: 121].

**499. \*pal-** ‘to break’: W 2 Mpn *pl-āḡ* (pl.<sup>50</sup>) ‘to explode, crash’; C 5 Dghw *pìlayà* ‘(rope) broke’ [Kr]; 3 Maaka *pìláayò* ‘to break, smash (pot)’ [SvP]; 7 Mafa *pal-* ‘casser (rocher, pierre)’; E 2 Kera *pálwé* ‘zerbrechen, rompre’.

Cf. W 3 Tng *paale* ‘to slap, clap’, Pero *páalò* ‘to slap’.

Deriv. in *-t-*: C 7 Muy *áplát* ‘to split (grains or seeds)’, Mol *pə̀ltay* ‘to split in half’ [FsM], Mada *áplàtà* ‘être écrasé (haricot, arachides)’.

Deriv. in *-k-*: C 10 Azum *poloka* ‘to crack open (nuts)’.

//Sem Arab *flq* ‘fendre, couper en deux’ [BK II: 631], ECush Oromo *folloqa* ‘break off’ [Grg].

**500. \*p[u]-** ‘to dig (out)’: W 3 Kupto *fùléy* ‘to dig out, gouge out, reveal’, Tng *puule* ‘to break up soil, to raise dust’; C 5 Pod *pə̀ləmə* idf. ‘creuser’; 7 Mafa *pul-* ‘déterrer, déraciner’; 8 Log *pil-wun* ‘creuser, hollow out’; E 1 Ndam *pálá* ‘creuser (évider) arbre’; 3 Smr *pól* ‘to dig’ [Jglb].

---

<sup>50</sup> For *-aN* pl. in W 2 see [BIP].

Derived nouns: C 5a Lmn *pálámú* '(pit)hole, trap'; E 6 Mok *pòlle* 'fossé, vallée'.

//Sem Akk *napālu* (Oakk) 'to dig out, to gouge out (eyes); quarry stones, to tear down, demolish' [CAD n1: 272], Sab *flg* 'cut a water-channel' [SD: 44]. ECush dull Dob *póolle* 'Loch in der Erde', Goll *poolle* 'Schlucht, gorge' [AMS].

For Akk 'to quarry stones, to tear down, demolish' see the previous root.

**501. \*pVI- 'to protect, care, cover':** W 2 Mpn *piél* 'to take care, be careful'; 6 Bade *pəlu* 'to guard, protect'; C 6 Daba *pəlà* 'protéger'; 5 Pod *pəla* 'couvrir de chaume; to roof, thatch'; 10 Azum *pola* 'to guide, shepherd, care for'. Cf. W 2 Goem *póol* 'to hide smth.' [Hlw].

Derived noun 'a cover': W 2 Ngas *pəlpəl* 'small round mat' [Brq]; C 5 Pod *pəláya* 'couvercle de vannerie', 5° Lmn *pəlày* 'small round mat to cover vessels and winnowing'; 7 Muy *pili* 'wicker food cover', Mada *pálya* 'disque en vannerie, vannerie', Mofu *pəlay* 'couvercle de jarre plat en paille tressée'; 10 Azum *polá* 'large leather shield', Musey *pol-na* 'la grand bouclier en peau' [ShyM]. Cf. W 5 Grnt *pèele* 'penis sheath' [Hr].

Note: 'to defend' > 'a cover' (derived noun) in Arabic.

//Sem Arab *nfl* (i) II 'défendre', *nawfaliyy-at-* 'sorte de voile en étoffe de laine en usage chez les femmes arabes' [BK II: 1316f]. Berb Ahag, Wlmd, Ayr *efel* 'être couvert d'un toit', Wlmd *asefel* 'toit' [NZ: 558].

**502. \*pVI- 'to search':** W 2 cf. Goem *pil* 'to watch or look at smth' [Hlw], Mush *piyéel* 'to search' [JgO]; C 3 Bana *p(ə)là* 'chasser, chercher'; 7 Merey *pəla*, Mbuko *pəlay* 'chercher'.

Deriv. in *-k-*: C 7 Mofu *-pəl-k-* 'rôder en cachette, chercher, fouiller'; E 5a Bid *palàk* 'désirer'. The semantic shift: 'to search' > 'to desire' seems tenable.

//Sem Akk *palû* (Aram. loan) G 'durchsuchen' [AHw: 817], OffAr *pl* 'to scrutinize, to scan' > Akk [HJ: 911], Arab *flw* 5. 'rechercher, examiner' [BK II: 634].

**503. \*pVI- < \*pwal- < \*wVpal- 'to cork, to bark' > 'to shave':** W 3 Tng *pulle* 'to peel (gr. nuts); to be hatched', *palle* 'to peel bark (for medicine)', Kupto *fülléy* 'to peel', Dera *piulé* 'to take off clothes'

[NmK], Bol *pelle* ‘shaving the face’ [GAB]; 5 Zaar *pul* ‘to remove the bark of trees, hemp to make ropes’ [CrZ]; C 2 Bura *pwala* ‘to pluck off petals of loosen bark’ [BIB]; E 3 Tum *pāl* ‘éplucher’.

Derived adj.: C 8 Log *plapla* ‘bald’ [AIL], (‘with removed hair’).

Derived noun: E 3 Tum *pùlál* ‘coquille’.

Deriv. in *-k-*: W 2 Ngas *pwòl-k* ‘to remove bit by bit from a shell’, *pwàl-k* ‘to husk’ [JgN]; 3 Bol *pòl-ku* ‘to peel off, strip off (bark from tree)’ [GAB]; C 10 Masa *púlók*, *púlót*, Ham *pólók* ‘décortiquer, écosser’, Musey *pólók*, Lew, Marba *plók* ‘décortiquer, écosser, éplucher’, Gizey *pólók* ‘éplucher’ [LexC], Musey *polokka* ‘écosser, muer’ [ShyM], Azum *puloka* ‘to peel smth off’.

Deriv. in *-t-*: W 3 Bol *pil-tu* ‘to hatch’ (‘the chicken hatched the egg’) [GAB]. Fot confusion of semantics ‘to peel’ & ‘to hatch’ see Sem Gur.

//Sem Arab *wfl* ‘peler qqch en en ôtant l’écorce’ [BK II: 1578].

a. **\*pil(VH)- ‘to cork, to bark’**: C 5 Pod *páláha* ‘to clean beans’; 10 Dzpw *pilé?*, Dari *pàlè?* ‘décortiquer’;

Derived noun: C 7 Dugwor *pàlè-ɲgwód*, Mbuko *pàlè-ngwád* ‘bark’ [GrM], Mol *pàlo-ngod* ‘skin’ [FsO].

Deriv. in *-d-*: C 7 Mol *pàlday* ‘to shell’ [FsM]; E 6 Mok *pildá* ‘décortiquer arachides’.

Deriv in *-t-*: C 7 Mafa *pàlat-* ‘écorcher’.

//Sem Geez *falfala* (K\*) ‘to shell, pierce’, Amh *fäläffälä* ‘shell (peas, beans)’, Har *filäfäla*, Gur *fäläfälä* ‘shell, hatch out, make a hole by scratching’ [LsG: 158], ECush Oromo *falfala* ‘husk’ [Grg].

**504. \*pVI- ‘to flow, pour’**: C 4 Gude *pulä* ‘to flow out’; C 7 Mofu *pálá* ‘verser d’un seul coup’; E 5a WDng *pállè* ‘asperger’<sup>51</sup>, cf. Mig *píláw* ‘abreuver, to water smb.’.

Derived nouns: a.W 5 Zaar *polpópli* ‘small river running down rocky slope’ [CrZ]; E 5a WDng *pèllèlè* ‘filet d’eau’.

b. **\*p[a]l- ‘a flow-through pond, lake’: W 1 Hs *fälámii* ‘a pond the water of which does not dry up’; 3 Krkr *fäalii* [GK], Bol *pàali* ‘lake, pond’ [GAB], Tng *paali* ‘large body of water (standing or flowing), lake’, Ngm (dil.) *fäali*, *hàali* ‘lake’ [NEH], Pero *pali*, Glm *pàl* ‘pond’ [SchB]; 7 DB *póló-k*, Kulere *’apilìn* ‘pond’ [RC]; C 10 Ham *pèlèw* (vowel assim.) ‘marigot long’ [LexC]. Cf. [BIL N°37].**

Derived verbs: E 5a WDng *pàlčè* ‘déborder d’un récipient’, EDng

<sup>51</sup> For WDng see [TN N°440].

*pòčikē* ‘déborder’.

//Sem Ug *pl* ‘rieseln, trickle’, Arab (Dozy) *fāla* (*fyl*) ‘vergiessen, rieseln’ [Ais: 255], Geez *falfala* ‘gush out, burst out as a fountain’, *falfal* ‘fountain’, Syr *pal* ‘sprinkle’, “for ‘spring of water’ cp. Tgr *fālfāl*, Tna *fālfalo*, Amh *fālfāl*” [LsG: 158].

**a. \**ʔapil-* ‘to wash, bathe’:** W 2 Mush *pla-ng* (pl. in *-aŋ*<sup>52</sup>) ‘to wash’ [JgO], Mghv *pəlan* ‘to wash’ tr. [JgS] ‘to rinse’ [BIM], Goem *pàlən* ‘to rinse smth.’ [Hlw], Ngas *palŋ* ‘to rinse, cleanse’ [JgN] W 3 Tng *pali* ‘to bathe’; E 1 Mobu *pélé*, Ngam *péle* ‘se laver’; 2 Lele *pil* ‘se laver’, Kaba, Nch *-pəl* ‘laver’ [HmK], Gbr *pelée*, Dormo *pelenga* ‘waschen’ [Luk]; 3 Ndam *pəla* ‘blanchir (laver) une chose’, Tum *pāl* ‘to wash things’ [JgIb]; 5 Mabire *apali* ‘laver qqch’ [HuJ], Bid *ʔápəl*, Mig *ʔàpìlò* ‘laver’, 6 Mok *òpìlè* ‘to wash’. Cf. W 5 Geji *pólti* ‘to wash’ tr. [Cs №845]. [JgIb \**pl* ‘wash’].

**505. W 2 \**pVI* ‘to sprout, to blossom’:** Ngas *pəl* ‘to sprout, bud’ [JgN], Goem *pál* ‘to cause smth to flower or blossom’ [Hlw], Mghv *pəl* ‘to flower’ [BIM], Mpn *pél* ‘to bloom’.

Deived noun: \**pVI-* ‘flower, sprout, child’: W 2 Ngas *m̀pèl* ‘blossom, young leaves, sprouts, buds, flower on tree’ [JgN], Mpn *pèl* ‘young shoots of plants’, Mghv *pəl* ‘flower’ [JgS, BIM]; 3 Pero *píllit* ‘flower’, Bol *píllili* ‘flower of a male date palm’ [GAB], Kupto *fillè*, Tng *pil* ‘flower’; C 9 Mnj *plapla* ‘fleur’; E 5 Mabire *ta-pil* ‘child’ [JnH]. Cf. C 2 Bura *pilpil* idf. ‘describes a small boy who is well dressed; a youngster who intrudes in the conversation of the elders’.

Derived adj. ‘new, fresh’: W 2 Mush *pál* ‘to be immature’ [JgO], Ngas *pal* ‘unripe; fresh sprouts or bud’ [FI], Grk *pla-ŋ* ‘young’ [BIY]; 3 Bol *pil* idf. indicates newness [GAB]; 5 ‘new’: Mng *pyele*, *pela-sa*, Tala *pyaalii*, Geji *pyaali* [Cs], Grnt *pyàali* [Hr]; C 4 Gude *pul* ‘very new’.

//Sem Akk *papallu* MA, SB ‘young shoot; offspring, descendants’, cf. *nip̄lu* OB ‘offshoot’ [CAD p: 105, n2: 247].  
For WCh 2 ‘unripe’, W 5 ‘new’ + Akk see [TN №439].  
[JgIb \**pl* ‘flower’].

**506. \*(*ʔa*)*pVI-* ‘to pay (a debt)’:** W 3 Pero *pilù* ‘to buy’; 4 Wrj *pəl-*, Mburku, Kariya *pul-* ‘to pay, ransom’ [SkNB]; C 2 Bura *pili* ‘to ransom’ [BIB]; 5 Mlg *pála* ‘leihen, to lend’, Pod *pəla* ‘to pay back’;

<sup>52</sup> For pl. in *-aŋ* in WCh 2 see [BIP].

5a Lmn *pāla* ‘compensate (re)pay’; Hdi *pālay* ‘to pay’, (compounds) *pāla-sāku* ‘to sacrifice to ancestors to remove the evil in the village’, *pāla-γəŋ* ‘to sacrifice to God’; 7 Mafa *pāl-*, *pīl-* ‘payer’, Mofu *-pāl-* ‘rembourser (une dette)’, Mada *āpal* ‘payer, lâcher, régler (affaire)’, Zlg *pāl* ‘rembourser’, Ould *-pāl* ‘indemniser, compensater’, Muy *āpāl* ‘to pay’; 9 Mbara *pūl* ‘to pay’; E 5a WDng *āpilè*, *āplè* ‘rembourser (une dette)’; 5b Toram *ʔāfil* ‘payer’.

Deriv.: E 5a Mig *pīlkò* ‘payer, rembourser, pay debt’. Note C 2 Bura *pala* ‘to exchange’; W 3 Krkr *fāl-tu* ‘to exchange’ [GK].

Derived noun: W 1 Hs *fālāaši* ‘wages’.

//Sem Akk *apālu* ‘to satisfy a demand; to answer’, *uppulu* ‘to pay a debt’, *apiltu* (MB, SB, NB) ‘full payment’ [CAD a<sub>2</sub>: 155f, 169], *napālu* (OA, OB) ‘to make a supplementary payment, to compensate’ [CAD n<sub>1</sub>: 275], Arab *nfl* ‘donner qqch à qqn’ [BK II:1316], Cush Oromo *fuullo* ‘bridle price’ [Grg].

**507. \*pal- ‘(flat) stone’:** W 1 Hs *fālali* ‘a large smooth rock or stone of about the same height as the surrounding land; a cemented slaughter-place’; 5 Zaar *pā:l* ‘type of flat stone (formely used to make the blade of farming instruments)’ [CrZ]; C 2 Bura *pāla* ‘stone’ [Ann, BIB], *pāla bḡa* ‘blacksmith’s anvil’, *pāla žinatu* ‘flint, rock’ [BIB], Həba *pelia* ‘white stone used for magic purposes’; 5 Wnd *pala* ‘rock’ [FW], 5a Hdi *pala* ‘stone’, Lmn *pālá* ~ *pāláká* ‘big stone, flat rock’ [Wff], Lmn *pala-k*, Hitk *pāláká* ‘stone’ [HmG]; 6 Daba *pàpàláh* ‘rocher plat, pierre large et plate’; 7 Mofu *pālay* ‘pierre creuse utilisée comme cuvette’, Ould *pēlēb* ‘pierre plat’; E 4 Mawa *pāl* ‘rocher plat’.

//Sem Akk *pīlu* (OB, Elam) ‘Kalkstein (Block)/limestone (used as building material, for inscribed foundation stones, for vessels)’ [AHw: 864, CAD p: 380], Berb Maroco dial. *tifilit*, *ifilu* ‘grosse pierre plat, dalle’, Shawiya *tifilt* ‘pierres qui se débitent en lames et servant de dalles’, Ahag *téfilt* ‘pierre plate’ [NZ: 561]. ECush dull Dob *pala-cakkó*, Goll *pal-takkó* ‘Schabstein der Lederhandwerker (bevorzug Obsidian)/kind of stone’ [AMS]. Note an isolated form in Omotic: SEOmeto Gaṭame *pālō* ‘stone’ [BdO: 95].

**508. \*pal- ‘flatland’:** W 3 Krkr *fāl-tò* ‘open space, area’, Bol *pal-ta* ‘gathering place, field, open area’; C 6 Daba *pālā* ‘la plaine’, Mina *pāláh* ‘outside’ [FrJ]; 7 Gis *pala* ‘Ebene im Busch’, *papala* ‘Ebene’,

Mbuko *pala* ‘desert’, Mofu *paaláh* ‘plaine, endroit plat’.

a. C **\*pal- ‘flat’**: 3 FK *mpələ̀hà̀y* ‘flat’, *mpələ̀hà̀* ‘dwarf’; 5 Pod *pə̀lá* ‘plat’, Mlg *pəl-téke* ‘flach’.

Note **\*pal- ‘flat’** in the following compounds: C 2 Chb *páplá mà srá*; 5a Lmn *páplé mà srá* ‘Fuss’ (note *sra* ‘Bein’) [Luk]; 7 Merey *pala-bat* ‘nom d’une os, os plat’.

//Sem Ug *pə̀lt* ‘f. ‘fallow land, waste land’ < *p’l*, byform of *\*pwl* [DUL: 648].

Note Sem Akk *palkû* ‘broad, vast’ SB [CAD p: 67] ~ W 4 Wrj *palaki-na* (if not < *pala-k-na*) ‘open area of field outside the compound’.

**509. \*paHal- > pall-, papal- ‘plank, frame’**: W 2 Mghv *pwáyál* ‘frame for hanging animals to be smoked’ [BIM]; 3 Bol *pə̀llo* ‘frame for a thatched roof’ [GAB]; 6 WBade *pə̀llon*, GBade *pə̀llau* ‘frame for a thatched roof’ (< Bol?); C 6 Buwal *pə̀pə̀lám* (compensatory redupl.) ‘plank’; 8 Kus *palo* ‘beam, rafter; plank’ [AIK]; C 10 Dzpww *pə̀l* ‘claire’. For ‘beam’ cf. W 3 Bol *pə̀-mpilám* ‘log, attached to the leg of a mad person’ [GAB]. For Cush ‘stick’ cf. E 5a cf. Bid *pə̀l* ‘manche de houe, hampe de lance’.

//SCush Irq *paa’ala* ‘sticks (thin) to make a platform or bed with; thin wooden pole, untied stick’ [MQK], Sem Akk *palû* (*pālu*, *pallu*) OB ‘rod’ [CAD p: 74], *palû(m)* ‘eine Stange’ (sum LW) [AHw: 817], Berb MC *tiflut* ‘assemblage de planches qui ferme un passage; planche, porte’, Shilh *iflu* ‘porte; planche’, Rif *tawlawt* ‘planche’, Ntifa *tiflut*, Ahag *taflut*, Figig *taflewt* ‘porte’ [NZ: 573].

For possible cognates of Eg *pjpt* ‘die Kielbalken des Schiffes’ see [EDE II: 418f].

**510. \*pVI- ‘(upper) arm > shoulder, wing’**: 5 Dyarim *pə̀lə̀* ‘wing’; C 1 Boka *pə̀l-fatə̀* ‘shoulder’ (*fə̀tə̀* ‘body’), Gbn, Gaa *pə̀l-*, [Kr]; 3 cf. FK *pə̀lə̀* ‘hand’ (rather - ‘arm’, cf. FK *pə̀lə̀-pə̀w* ‘sleeve’, *pə̀lə̀-fúə̀* ‘branch’, i.e. – ‘arm of tree’, while ‘hand of tree’ is ‘leaf’), Higi Moda, HN, Kap *pilla* ‘arm’ [Meek], HB *pə̀lə̀* ‘arm’ [Kr]; 8 Kus *pala* ‘wing’ [AIK], Log *mpála* ‘arm’ [Mo: 31]; 10 Gizey *vùn pə̀l*, Masa, Ham, Musey *pə̀l*, Lew *pə̀pə̀l*, Marba *pə̀pə̀l* ‘épaule’ [LexC], Musey *pella* ‘l’articulation de l’épaule’ [ShyM], Azum *pepela* ‘shoulder-blade’.

Derived noun: **\*pVpVI- ‘bat’**: C 5 Pod *pə̀pə̀la*, Wnd *na-palapala* [Voc]; E 2 Lele *pə̀pə̀lédí* ‘chauve-souris’.

**511. \*pVI- ‘knife’:** W 2 Ngas *pel* ‘knife for cutting grass, etc., sickle’ [FI]; C 7 Mbuko *péla-d* ‘petite lame’; 8 Makari *pil* ‘razor’.

Cf. C 7 Mofu *-pálár-* ‘(se) fendre facilement’; 10 Musey *palaw-ra* (< \**plw*) ‘to cut meat in pieces’ [ShyM]. A denom. verb?

//Cush dull Harso, Dob, Goll *pillawho*, Gaw *pillawo* ‘Messer’ [AMS].

a. \****pil-* ‘sharp point’:** W 3 Tng *pela* ‘pointed wooden tool’, Kupto *fil* ‘pin’, Bol *pil* ‘wooden pins’ [GAB]; 5 Bogh *pilaŋ* ‘spear’ [Cs]; 7 Karfa *fəl* ‘wooden arrow’ [RC]; C 1 Hona *pèla*, Boka *pèla* ‘spear’ [Kr]; C 7 Muy *plà-t* ‘broad-headed spear’ (less probably < ‘flat’, cf. №508a); E 5a Bid *pélpèl* ‘lance (grande)’.

Denom. verb: W 5 Dott *pál*, Zaar *pelá* ‘to sharpen’, *pelapelá* ‘sharp’ [CrD, Z]; C 6 Buwal *plav* (< *plap*) ‘to pierce’.

//Sem Akk *apelu* (arrowhead(?); Nuzi, foreign word [CAD a: 169], SOm Ari *pal’a* ‘arrow’ [BnAr], Cush Ong *falde*, Tsam *palde* ‘arrow’s point’ [SaT]; Berb MC *tafala* ‘lance, épée, baïonette’, Izns *taffala*, Shilh *tafala* ‘baïonette’ [NZ: 559].

For Berb + Bid see [TN №570].

b. \****pil-* ‘nail’:** C 2 Mrg *pil*, Klb *pilu* ‘nail’ [Meek], Bura *mpil* ‘claw, nail of finger or toe’ [BlB]; 3 Bana *p(ə)là* ‘ongle’, Hya *phala*, Kap *plá* ‘nail’ [BlH]; 7a Skn *pəla-k* ‘fingernail’; E 5b Jegu *filló* ‘fingernail’.

c. Cf. W \****pil-* ‘kind of coarse grass, spear grass’:** 2 Ngas *pil* ‘a strong spiky grass’ [FI], ‘spear grass’ [JgN]; Mghv *piil* ‘swordgrass’ [BlM], Mush *piil* ‘elephant grass’ [JgO], Mpn *pīil* ‘spear grass’; 3 Dera *pépèl* ‘type of coarse grass for mats’, *pīli* ‘thatching grass’ [NmK], Bol *popol* ‘type of grass that grows in river beds’ [GAB]; 5 Dott *pūilá* ‘weed growing along roads, used to make brooms’ [CrD].

//Cf. Cush Burji *fál-a* ‘straw’ [SsB].

For W 2 ‘spear grass’ < AA \**bl* ‘reed’ see [TN №288].

**512. \*pVHVl-/\*HVpVI- ‘ashes’:** W 4 Wtj *pəlii-na*, Jmb *buli*, Miya *pəli*, Kar *pīli*, Mburku *pīli* ‘ash’ [SkNB], Miya *pəliy* [Sch]; E 5a Mig *pèelú* ‘tison’. Note W 4 *p-* < \**pH-*/\**Hp-*.

**513 \*pVm- ‘to hit, crash’:** W 2 Ngas *pam* ‘to flatten’ [JgN]; 6 WBade *pəmu* ‘hit, strike’; C 10 Peve, Hedé *pum* ‘to hit’ [Shy], Dari *pūm*, Dzpw *pám* ‘frapper, battre’; E 4 Barein (dial.) *pámó*, *pámō* ‘to crash’.

//Cf. SCush rift \**puhum* ‘to smash grains, pound grains’: Alg *puhum*, Bur *puum* [Kies].

**514. \*pan- ‘to wash, to bathe’:** W 5 Bgh *paanak, paaanki*, Mng *paan, pane* [Cs], Bgh *paanáŋ* ‘to wash’ tr. [Cs № 845]; C 2 Bura *pǎrá* ‘to bathe, bath’ [BIB]; 3 FK *pányí* ‘to shower, bathe’; 5 Pod *para*, Gdf, Chn *pàrà*, Dhgw *para* ‘to wash’ [KimG]; 6 Daba *pān* ‘se laver’; 7 Mofu *-pǎr-*, Mafa *pán-* ‘(se) laver, se baigner’, Cuv *mépénèy* ‘laver’. Cf. W 2 Goem *gǎ-pūŋ* ‘hippo’ [Hlw].

**515. \*pan- ‘to build, repair, plaster’:** W 2 Goem *pàŋ* ‘to build with clay, plaster’ [Hlw], cf. Ngas *pàŋ* ‘sitting arrangement made of stones’ [JgN]; C 5 Mlg *vónya* ‘kleben, reparieren’; E 5a Mig *pánáw* ‘construire, réparer’. Cf. C 10 Dari *pāŋ* ‘attacher’.

a. E **\*pin-** ‘to work, build, plait’: 4 Mawa *peniy-aŋ* ‘travailler’, *peni* ‘travail’, EDng *pinē* ‘façonner, travailler, confectionner un charginier, un panier, un mur’, Bid *pin* ‘tresser une natte, secco; construire’, WDng *pinè* ‘construire par assemblage (poterie, assemblage de colombines, certain de tressage)’. Cf. W 3 Pero *péndà* ‘to be able’. //Om Shin *fün-* ‘machen, arbeiten’ [LmSh].

**516. \*pVn- ‘to give, to pay’:** 2 Ngas *pan* ‘to give, to hand to one’ [Fl], *pān* [JgN], Goem *pini* ‘to give’ [Kr]; 4 Paa *pun* ‘to pay’, *pān* ‘ransom, free’ [MS], Miya *pāna* ‘pay, ransom’ [Sch], Siri *punu* ‘to pay, ransom’ [SkNB]; C 3 HB *pan-do*, HGh *pan-de*, HF *pan-to* ‘to sell’ [Kr]; 7 Baka *par* ‘payer’ [BAS]; 7a Skn *pār* ‘to pay’, *pāra* ‘to sell’.

Derived noun: W 3 Goem *p’yán* ‘trade, price’ [Hlw]

//Sem Akk *panū* s. pl. (a type of payment) OB 95, cf. Arab *fnn* (u) ‘prolonger à qqn le délai pour le paiement la dette’ [BK II: 635].

For W 4 Wrj *pəl*, Mburku, Kariya *pul* ‘to ransom, pay’ see №505.

For AA *\*bn* ‘to give a share’ see [TN №150].

**517. \*pVy/wVn- ‘to break, beat’:** W 2 Ngas *piin* ‘break, divide’ [Fl], *pyan* ‘to break (of many things)’ [JgN], Msh *piin* ‘to break (apart)’ [JgO], Mpn *pīin*, pl. *pyān* ‘to break a round object’, Goem *pyán* ‘break or shatter smth (e.g., a pot)’ [Hlw], *piaram* (pl.) ‘to break’ [Fp], Chip *piyān* ‘to break in pieces’ [Kr], Mghv *piin*, pl. *pyan* ‘to break, split, smash’ [BIM]; 6 Fyer *pyan* ‘to break’; C 10 Musey *poŋ* ‘to hit’ [ShyM], *póŋ* ‘frapper un person’ [LexC], Musey, Marba *póŋ* ‘battre’ [LexC]; E 5a Mig *páano* ‘to beat drum’ [Jglb].

Note W 3 Mghv *pun* ‘to thresh maize’, *puun aas* separation of flour’

[BIM].

Deriv. in *-d-* (directional): W 3 Tng *paŋ-dε* ‘to tear, break off’.

//Sem Akk *pēnu* ‘to crush, grind’ Nuzi (only Inf. attested) [CAD p: 326]. For W 2 see [TN №396].

**518. \*pVn- ‘to drive, chase’:** W 2 Mghv *pun* ‘to eject, evict’ [BIM], Ngas *pán* ‘to chase, drive off’ [JgN], Mushere *pun* ‘to remove, chase’ [JgO]; cf. C 9 Mbara *vìnì* ‘to send’.

Deriv. in *-g-* (or *-k-*): C 3 FK *vùngá* ‘to send s.o. away unpolitely’, Kap *punge*, HF *puŋinto* ‘tp push’ [Kr].

//Sem Geez *fannawa* ‘send away, off, forth’, Tna *fännäwä* ‘release abandon, send’ [LsG: 163]. Accord. to Leslau, EthSem forms are cognate with Arab *fny* ‘turn (away)’, Aram Syr ‘turn toward or upon’, denom. from ‘face, front’. Cf. also Arab *fnn* ‘mener, faire marcher devant soi’ [BK II: 635].

[AA I №26: Ngas-Sem, TN №402: Arab, Mushere, Ngas].

**519. \*pVn- ‘to cut, to castrate’:** W 2 Ngas *pun* ‘to castrate; also used of cutting off the combs of cocks’, Mghv *pùn* ‘beschneiden (Hund, Widder, etc.)’ [JgS], Ngas 7 cf. Fyer *pun* ‘to circumcision’ [RC]; C 6 Buwal *peŋ* ‘to cut at an angle’, 7 Zlg *pàŋ* ‘couper’, Mbuko *pànpàn* ‘couper de la hache/houe’, 9 Mulwi *pìini* ‘faire un sacrifice sanglant’. Cf. E 5a Ubi *pannè*, 5b Brg *fàanó*, Tor *fannà* ‘hache’.

//Sem Geez *fanna* ‘cut off the end of a nose’, Amh *fonnänä* [LsG:162], Som *finiinay* ‘to splinter’ [LIS]. Cf. Eg *pnz* AR a. ‘(den Kopf des Rindes, die Rippenstück) abtrennen, abschneiden’, b. ‘(Haare) ausziehen’ [EG I:510].

For W 2 < AA *\*bn* ‘to make distinction’ see [TN №150].

**520. \*pVn- ‘to blow, winnow’:** W 2 Mush *pun* [JgO]; 3 Bol *pìn<sup>?</sup>yu* ‘whistling’ [GAB], cf. *pìn<sup>?</sup>yú* ‘Pfeifen, whistle’, *<sup>?</sup>i pìn<sup>?</sup>yú* ‘to whistle’ [LkB], Krkr *fin<sup>?</sup>yau* ‘whistling’ [GK]; E 2 Lele *pìny* ‘souffler avec la bouche, vanner’, E 5a EDng *pánné* ‘souffler dans’, WDng *pàané* ‘jouer d’un instrument à vent (flûte, corne de chasse..), *púnnà* ‘corne de chasse’.

Deriv. in *m-*: C 3 FK *mpányí* ‘to breathe’, *mpànyì* ‘life’.

**521. W \*pVn- ‘to think, know’:** 2 Grk *impen* [Fp], *k-pàn* [BIY], *pən*

‘to know’ [JgIb], Mghv *pàn* ‘to think, worry, remember’ [BIM], Mpn *pàn* ‘to think, remember’; 3 Tng *pəni* ‘to recognize, understand’; 5 Wangdai *pəŋ*, Grnt *-pin-* [JgIb], Grnt *mpəna* [Cs], *pəni* [Hr] ‘to know’. //Cf. Sem Geez *fayna* ‘to estimate, evaluate’, Tgr *fänna* ‘to explain’ [LsG: 173]. Akk *panu* ‘wish, choice, intention, plan, concern, consideration, opinion’ [CAD p: 84], Eg *pʿn* Pyr ‘eine gute Eigenschaft: klug o.a. (vom Menschen)’ [EG I: 504]. Cf. E 5a WDng *páníwò* (rare) ‘homme habile’.

The following forms may be cognate:

a. **\*pan-** ‘to know (magically)’: W 3 Tng *pənən* ‘magic power’; 5 Mng *pəŋ* ‘to tell fortune’ [Cs].

Derived noun: W 2 Ngas *ka-pan* ‘kind of ghost’ [Fl]; E 2 Lele *pányá* ‘spirit of ancestors’.

Derived verb: W 3 Bol *pùn-su* ‘to curse, cast a spell on’ [LkB, GAB]. Cf. W 2 Grk *k-paŋ* ‘hatred’ [BIY].

**522. C \*pVn-** ‘to open’: W 5 Guus *puŋ* [CrG]; 4 Nzn *pùnà-d* [Kr]; 10 Dzpw *poŋ* ‘to open’ [JgIb] Cf. Muy *prēkā* idf. ‘opening wide’.

//Cush Kamb, Alb, Sid *fan-*, Konso *pan-* ‘open’ (acc. to Lamberti < *\*ban-*) [LmW: 354].

a. E 5a **\*pann-/paan-** ‘to stretch’: EDng *páanyé* ‘s’étirer les bras’, Bid *paany*, Mig *pánnyó* ‘s’étirer’ WDng *pàanyè* ‘se détendre, s’étirer, se débourdir’.

//Cush Beja *fenin* ‘ausstrecken, strecken’ [RBd].

**523. \*pan-** ‘millet stalk (for plaiting)’: C 7 Mofu *pánay*, Chuv *pándày* ‘tige de mil’; 7a Skn *panay* ‘millet stalk’.

Deriv.: W **\*pan-** ‘plaited obj.’: 4 Wrj *panai* ‘zana mat, woven fence’ [BIS]; 3 Dera *pándá* ‘mat’ [NmK].

**524. W \*pan-** ‘fire’: W 3 Bol *pònò* [GAB], but cf. *fono* [LkB], Ngm (dial.) *fànò*, *hànò* [NEH] ‘flame’; 4 Paa *pàna* ‘fire’ [MS], Miya *ápanà-kú* ‘embers’ [Sch]. Cf. W 2 Grk *k-pən* ‘to smoke fish’ [BIY].

//Cf. Sem Geez *pānā*, Tna, Amh *fana* ‘lamp, torch’ < Greek *phanē* [LsG: 414], Cush Hamir, Bilin *fanaa* ‘torch’ [RCh, B] < Ethioseme.

a. C **\*pin-** to roast’: 7 Mafa *pín-* ‘griller’; 7a Skn *pən* ‘to roast’ [ThS: 124]. Cf. W 3 Pero *pún-dò* ‘to cook’.

b. W **\*pin-t-** ‘to make fire’: W 3 *\*pin-t-* ‘to make fire’: Krkr *fintu* ‘to

blow, start fire' [GK], Ngm *fintô* [NEH], Bol *pintu, pittu* 'to kindle fire' [GAB], Dera *pindé* 'to blow on fire' [NmK], cf. Tng *pelde* 'to light fire'.

//Cf. Om Wolt *fen* 'to boil', Gamu *pent*, Dac'e *fent* 'to boil', Kac'ama *pant* 'be hot' [LmW: 355]

**525. \*pVn-** 'kind of fish': W 2 cf. Goem *p'aan* (-a- pl.) 'k of fish (white and shiny color, red tail)' [Hlw]; C 10 Gizey *pinéy*, Masa, Musey *pinì*, Lew *piní*, Marba *piní* 'kind of fish (*Chrysichthys auratus*)' [LexC]; E 6 Mok *pùuni-só*, pl. *pùuni* 'fish' gen.

**526. \*pang(u)** 'stone, rock': W 1 Hs *fáng<sup>w</sup>ái* 'a high rock with no protuberances'; 2 Ngas *pang* 'a wall, terrase made of stones and rocks; a very large rocky hill or mountain' [Fl], Mush *pàng* 'sitting place of stone', Goem *p'áj* 'stone, hill, mountain' [Hlw], Mghv *pàng* 'soil type, red and stony' [BIM], *pang* 'stone' [JgS], Mnt *pang* 'stone' [Fp], Chip *pəŋ* 'stone, mountain' [Kr]; 4 Wrj *pang<sup>w</sup>a-na* 'local curtain or screen made of mud bricks' [BIS]; C 3 FK *pángá* 'rocks'.

//Cf. Sem Akk *panāgu* 'to mount, to cap' EA, SB [BK II: 78].

**527. \*pun-d-** 'thigh': W 3 Pero *pún-dè* 'thigh (of man)', Tng *pùndo*, Bol *pùndo* [GAB], Krf *fōndó* Krkr *fūnto, fūntau* [GK], Ngm (dial.) *hùndò, hùndo*, Glm *pəndá*, Gera *findí*, Dera [SchV] 'thigh'; C 3 FK *pún* 'thigh' [BIFK].

//Cf. Sem Geez *fanđot* 'anus, buttock', Tgr *fāndot* 'buttock' [LsS: 162]

**528. \*par-** 'to pluck (fruit, beans, grass)': W 1 Ngas *par-p* (pl.) 'to pluck (of grass, fowls)' [Fp]; 4 Miya *par* 'to pick (beans)' [Sch]; C 5 Pod *palá* 'final weeding'; 6 Daba *pàr* 'enlever en arrachant', 7 Mafa *pár-* 'ramasser, collecter, cueillir', Ould *-pàlày* 'cueillir (des fruits)', Mada *ápal* 'cueillir (haricots), ramasser', Muy *ápālāy* 'pick one by one', Chuv *má:pàlèy* 'to weed (2nd time)', Zlg *papəl* 'to pluck weeds'; 10 Peve *par* 'to pluck' [Vn]; E 2 Lele *por* 'cueillir, déchirer'; 4 Mawa *pərəŋ* 'arracher, déchirer'.

Deriv.: E 5a Bid *poròk* 'déplumer'.

//Sem Mhr *frōr* 'to strip a fruit off a tree, bush' [JM: 97], cf. SCush Irq *puru<sup>s</sup>* 'to strip off' [MKQ], Alg *puru<sup>s</sup>* 'to strip off' [Eh: 145].

a. \*p[u]r- 'to tear': C 6 Daba *pūr* 'déchirer'.

Deriv. in *-k-*: W 1 Hs *fàrkà* ‘rip, tear open’, *fàrkaa* ‘rip and remove (cloth)’.

Deriv. in *-t-* C **\*pur-t-**: 5 Pod *pəṛə-ta* ‘dislocate (a limb); arracher’; 7 Mafa *pur-t-* ‘arracher (dent, racine)’.

For this extension see: C 5 Pod *ta-e* ‘personne’, W 4 Mburku *mur-t’a*, *Jmb amir-t’u* ‘ring’ (‘iron-person’) and [CLD II №302], note that reflexes of Ch *t* & *\*t’* have fallen together as *t* in C 5, 7.

Deriv. in *-ç-*: C 5 Pod *pəṛáca* ‘déchirer’.

//Sem Arab *fifr* ‘déchirer (une outre, etc.)’ [BK II: 582], Berb Qab *fri* (*fry*) ‘déchirer, ouvrir (des boyaux, des tripes, pour les nettoyer)’ [NZ: 648].

**529. C \*par- ‘to sacrifice’**: 7 Muy *prà* ‘sacrifice, God, spirit’, *pápàrà* ‘a sacrifice’, Ould *-pàr* ‘donner (pl. choses)’, 10 Gizey Ham, Lew, Marba *pòr*, Masa *pòr*, *pùrò*, Musey *pòò* ‘sacrifice de purification’ [LexC], Musey *puu-ra* ‘donner un cadeau à qqn qui part pour un voyage’ [ShyM].

//Sem Sab *fr<sup>s</sup>* ‘pay/render tribute of first-fruits’ [Bl: 410], Off, Palm, Jud Aram *pr<sup>s</sup>* ‘to pay’ [HJ: 942].

a. **\*par- ‘to exchange, trade’**: W 1 Hs *fùrfurà* to ‘barter, exchange one thing for another’; 3 Dera *pàré* ‘to exchange’ [NmK]; C 2 cf. Bura *pari* ‘to return (goods)’ [BIB]; 4 Gude *pəra* ‘to exchange; C 7 Mol *par* ‘to pay’ [FsM] 10 Dari *pār* ‘petit commerce’, Musey *paara* ‘faire le commerce’ [ShyM].

Deriv. in *-ŋ* pl.: W 2 Goem *pírīŋ* ‘change or exchange smth’ [Hlw], Mpn *pārīŋ* ‘answer, exchange’ Ngas *pyarng* [Fl], *pyarm* [JgN] ‘to exchange’.

//Cf. Eg *prw* MR ‘Lieferungen; delivery’ [EG I: 526], Berb Zng *teffert* ‘cadeau’, Ghad *efer* ‘louer ou acheter’, Wlmd *efer* ‘louer’, Nef ‘salaire’ [NZ: 603]. Cf. Berb Shilh *fru* ‘payer (l’impôt, dettes)’, Maroco dial. *fru* ‘payer ses dettes, rembourser’ (if not < ‘régler, terminer’, as in [NZ: 602]).

**530. \*pa(?)Vr-** (> *paar-*) ‘to braid a rope, plait’: C 10 Gizey, Masa, Ham, Gizey, Lew, Marba *pár*, Musey *páá* (< *par*, replacing lengthening of a vowel) ‘tresser cord (entre les mains, sur cuisse)’ [LexC], Masa *pàr* ‘tresser’ [CC], Musey *paara* ‘filer, tresser’ [ShyM], Dzpww *pár* ‘filer’, Azum *para* ‘to roll (cotton fibre into a thread), to

make (rope)'; E 5a Mig *páaró* 'tresser', Bid *paray* 'tresser une corde', EDng *páaré* 'tresser (natte, panier)', WDng *pàaré* 'tresser (une natte, une corde)'.

Derived nouns: a. C 7 Muy *pára-pàrà* 'cord, belt'.

b. \**pVr-* 'a plaited object': C 4 Gude *páari'inà* 'woven straw pot cover'; E 3 Smr *pore* 'mat' [Bn]; 5a Mig *pârpâr* 'rideau tressé en paille'. //For possible cognates of Eg *pry* 'Binde' see [EDE II: 474f].

**531. \**pa(?)Vr-* (> *paar-*) 'to make ridges for planting, to dig':** W 1 Hs *fârâa-farâa* 'making ridges at the end of rainy season for spring sowing; arid soil'; 2 cf. Mush *peer nung* 'to make ridges of a farm' (apud [TAS: 285]), *nung* 'piece of land' [JgO]; 6 Ngz *pàarú* 'to make holes with planting hoe to drop seeds'; C 10 Musey *paara* 'creuser' [ShyM]. Note C 1 Tera (dial.) *para* 'to bury' [Kr].

Deriv. in *-d-*: W 1 Hs *fâr-daa* 'to hoe up groundnuts'; 6 Bade *pâr-dú* 'to hoe up', cf. Ngz *pùudú* (< \**puddú* < \**pur-dú*) 'to bank up, hoe up or plow up to make hills'; E 5a WDng *pâr-dâ* 'tranchée circulaire autour d'un arbre pour l'arrosage'.

Cf. W 1 Hs *fârtányà, fântányà* 'a small hoe with triangular blade'.

According to [SkH: 66] < \**farT+nya*.

//Sem Arab *f'r* 'creuser (la terre), enterer qqch, cacher qqch sous terre' [BK II: 29], Berb Sened, Shilh *afer* 'creuser' [NZ: 607].

The next root may be cognate.

**532. \**pVr-* 'to cultivate':** C 7 Balda *àpūr-s* 'to cultivate' [Bry]; 8 Makari *fari* (irreg. initial, probaly < *wfr*, cf. Sem) 'deuxième labour du champ' [ALM]; For a noun deriv. cf. W 3 Pero *pórò* 'work' n., i.e., 'field-work', note ECush Som *fal-* 'arbeiten, hacken'.

Deriv. in *-t-*: E 1 Kera *pártí* 'défricher'.

Derived noun: W 2 Mghv *parkiya* 'small hoe used mainly for scrapping and weeding' [BIM].

//Sem Geez *wafara* 'go to a field', *wafr-* 'field, farm', *mofar* 'beam of a plough', *mufār* 'farmland, pasture, village', Tna *wāfārā* 'go to a field', *tāwāffārā* 'to plough, cultivate', Cush Saho *ifār* 'go to a field' (< Sem) [LsG: 606], Sab *wfr* (tfry) 'to cultivate, be cultivated' [SD: 158]; Cush Saho *faraa'e* 'to dig, to hoe' [Vr].

**533. \**pir-* 'to fly, jump, run away':** W Hs *firaa* 'to soar into the air';

3 Kupto *firò* ‘to fly’, cf. Krkr *pir* idf. indicates whirring of wings [GK]; 7 Karfa *pùrà* ‘to fly’ [RC]; 5 Bogh *pìiru* ‘to jump’ [Cs]; C 1 Hona *pàra* ‘to leap, fly’ [Nm]; C 4 Tsvan *pàrə-n* ‘to fly’ [BryJ], Gude *pār* idf. ‘flying away’; 5 Pod *pàrəràra* idf. ‘s’envoler’; 9 Mulwi *píri*, Mnj *piri* ‘sauter’; 10 Masa *pìr* ‘s’élèver au dessus du sol, bondir, sauter, voler; s’éloigner en courant, s’enfuir’ [CC], Masa, Gizey, Lew, Marba *pír*, Ham *píi*, *pír* Musey *píi* (< *pir*) ‘voler, s’envoler, bondir, sauter’, Gizey, Ham *pír*, Masa *pír*, *pí*, Musey *píi* ‘s’enfuir’ [LexC], Azum *píra* ‘jump, spring up, over’, Musey *píira* ‘voler; fuir, échapper’ [ShyM].

Derived noun: C 7 Mofu *párr*, *pérr* ‘envol d’oiseaux’.

Derived verbs: W 6 Bade *pàrdàgu* ‘to escape, run away’; C 6 Buwal *pārḷòk<sup>w</sup>* ‘to escape’.

a. **\*par-** (pl. in *-a-*?) ‘to hop, jump’: W 2 Ngas *pyaar* ‘to jump, hop’, [JgN], Mpn *pāar*, Goem *parr* ‘to jump’ [Fl], *páar* ‘to jump or bounce’ [Hlw]; E 1 Mobu *pəre* pl. ‘sauter’, cf. *pare* ‘monter à cheval’; 3 Smr *pār* ‘to jump’ [JgIb].

Deriv.: C 5 Pod *peré-ke* ‘to jump, bound’. Cf. W 1 Hs *fàaraa* ‘locust or grasshopper’.

//Cush Beja *fi(i)r* ‘fliegen’, *far* ‘springen, hüpfen’ [RBd]. Note the similar correlation of vowels in Chadic and in Beja (*-i-* ‘to fly’ ~ *-a-* ‘to hop, jump’). Eg *pry* ‘herforgehen, herausgehen, emporsteigen, hinaufsteigen’ [EG I: 518], Eg *prpr* ‘umherspringen’ [EG I: 532], Sem *\*pr* ‘fuggire, come in volo’: Ug *pr* (*pr*), Aram *pr*, Arab *farra* ‘fliehen’ [Fron 5.66], Hars, Soq *fer* ‘voler, courir’, Jib *ferr* ‘voler, sauter’ [LsS: 342], Mhr *frr* ‘to jump, fly up, flee’ [JM: 96], Cush agaw Bilin *fir y* ‘to fly’ [ApAg:70], Saho *fire* ‘to fly’ [Vr], Omot NWometo Gamo *fir*, Basketo *fər*, Dorze *pírap*; SEOm Zayse *para-dḏ*, *fər-*, Yemsa *fuul*, Aroid *fār* ‘to fly’ [BndO: 142, 198, 305, 326]; Berb *\*f-r(r)*: Wrgl *u-fər*, Izdeg, Sghr *a-fru*, Shilh *firri*, *farri* ‘voler’, etc. [NZ: 597f].

[Nm *\*pərə* ‘fly, jump’, JgIb *p-r*; Coh №366; Dolg: 46, GrL: 300, AA 1 №33 *\*pVr* ‘to fly’, №46 *\*pVr* ‘to jump’]. For possible cognates of Eg *pʕ* (OK) ‘auf-, fortfliegen’ see EDE II: 379-384].

**534. \*pir-** ‘to drop, throw’: W 3 Krkr *fíraa* ‘to throw’ [GK]; C 2 Bura *peri* ‘to lay a thing or put down’ [BIB]; 7a Skn *pàra* ‘to drop, throw’ [DSk, ThS].

Deriv in *-t-*: ‘to slide down’: C 4 Gude *pəritə* ‘slip off, slide off’; 7 Mofu *-pərt-* ‘lâcher, laisser tomber, tomber’. Cf. E 5a Bid *per-gèt*

‘glisser d'un arbre’.

Cf. C 7 Mbuko *per-slolo* ‘thrown down’.

//Sem Arab *ʿfr (i)* ‘jeter qqun par terre et le rouler dans la poussière’ [BK II: 296]; Cush dull Harso *po<sup>ʿ</sup>*, Gaw *pur<sup>ʿ</sup>* ‘fallen’ [AMS], Som *fariisiyey* (Caus?) ‘cause to sit down’ [LIS].

**535. \*puHVr- > puur- ‘to rub in hands’:** W 2 Goem *puur* [phù:r] ‘to rub or twist smth with hands or feet’ [Hlw], Mush *pukur* (internl *-k-* pl.) ‘to rub’; 3 Tng *pure* ‘to rub smth in hands’, Dera *pùuré* ‘to rub’ [NmK]; 6 Ngz *pàrpàrú*, *fàrfàrú* ‘to roll forth and back between hand’; E 1 Kera *pápré* ‘reiben, zerknitern’.

Derived noun: C 8 Afd *phro* ‘Handmühle, handmill’ [Sol:132].

a. **\*pVr- ‘to break’ (tr., intr.):** W 2 Ngas *paarp* (pl. in *-p*) ‘to smash (with a noise)’ [Fl]; 3 Tng *puure* ‘(to cut or) break smth into pieces’; 5 Bogh *puray* ‘break stick’ [JgIb]; C 3 Bana *prá’wá* ‘se casser en deux’; 6 Buwal *par* ‘to come apart’; E 4 Mawa *əpar-an* ‘démolir (une maison)’.

//SCush rift *\*puhuru* ‘smashing, pounding’: Alg *puhuru* ‘smashing, pounding’, Bur *puuru* (irreg. loss of *-h-*), Irq, Gor *puurú* ‘flour’ [Kies: 226], Sem Akk *parāru* (uncert. meaning) ‘to break up, shatter, disperse’ [CAD p: 161], Geez *farafara* ‘to crumble bread’, Aram *parper*, Ug *pr*, Hbr *pr* ‘break’, HbrPb *pirper* ‘crumble, pulverize’, Tgr *färfära* ‘be reduced to powder’, Amh *färäffärä* ‘to crumble’ (accord. to Leslau, Arab *farfara* ‘couper, briser, déchirer’, Tna *färfärä* ‘cut wood or stone into small pieces, break into small pieces’ also cognate) [LsG: 165]; Berb Wlm, Ayr *farfar* ‘se frotter le mains, frotter le cou’, Ahag *fuffer-et-* ‘frotter’ [NZ: 609].

Derived verbs: a. **\*pVr-s/c- ‘to crumble, grind’:** C 7 Mada *óprósó* ‘s’émietter, to crumble’, Mofu *-párs-* ‘reduire en poudre’; E 6 Mok *pìrzá* ‘écraser (des grains)’.

//Sem Hbr *pāras* ‘break (bread)’, Aram *pāras* ‘divide, break up’, Geez *farasa* ‘be destroyed, demolished’ < Sem **\*prc** [LsG: 167].

b. C 5-5a **\*pVr-ç-**: Gava, Chn *prca*, Glv *prc<sup>o</sup>-ga* ‘to squeeze’ [HmG].

c. C **\*pVr-t-**: 4 Gude *pəratə* ‘to smash up (between stone, teeth)’; 6 Daba *pərat* ‘casser, briser en deux parties’.

Cf. [AA I №29]. For Ch-Berb see [TN №418].

**536. \*pVr-** (possibly, < **\*Hpr**) ‘to pour, to spit’: W 2 Ngas *por* ‘to

spit (out)' [Fl]; 3 Krkr *fūuru* [GK], Bol *pūuru* 'to spray' [GAB]; 6 Duw *fāaro* 'to spray' (irreg. initial, < *Hpr* ?); C 6 Buwal *per* 'to sprinkle water', Mbedam *pārēw* 'to spit (saliva)' [LMb]; 7 Mbuko *péré* 'asperger avec la bouche', Ould *-pārò* 'verser', *pàrày* 'verser, jeter pl. choses' Mofu *-pápər-* (compensatory redupl.) 'projeter de l'eau avec la bouche, vaporiser de l'eau (sur une natte)', Mol *pəray* 'to spray' [FsM]. Partial redupl.: C 4 Mwl *ùpòràpà* 'to pour' [Kr]; 9 Mulwi *pùrfi* 'vaporiser avec la bouche'; 10 Masa *púruíf* 'arroser avec la bouche' [LexC].

Deriv. in *-s-*: C 10 Musey *purussa* 'vaporiser avec la bouche' [ShyM], Gizey, Ham, Musey *púrús*, Lew, Marba *prús* 'arroser avec la bouche' [LexC].

Cf. also: W 5 Plc *pərǝi* 'to flow' [Cs №767], C 7 Ould *-pèrgè* 'to pour from one vessel to another', *-pārēgē* 'verser dans un recipient; jeter'.

Derived noun: 'rain, rainy season': C 10 Dari *pùwōr* 'pluie' (pl.?). E 'rainy season': 1 Kera *páarú*; 4 Sok *pírdii* [Luk], Bigrit (dial.) *pír*, *pīrī*, cf. Mawa *purgun*.

//Sem Arab *'fr* 'arroser les céréales pour la première fois' [BK II: 296].

Note the following correlation: initial *ʕ* in Arabic ~ reduplication of the first syllable in C 7 Mofu.

**537. \*pVr- 'to wrap, turn':** C 2 Bura *pəra* 'to wrap around' [BIB]; 3 FK *pər* 'to wrap, turban', Bana *párə* 'enrouler, envelopper'. Cf. W 2 Mpn *pàréy* 'to turn over' (pl. in *-y* ?).

//ECush Som *foorori* 'to turn smth. over, bend smth.' [LIS], cf. Berb *fry* 'tordre, courber' [NZ: 635].

Derived nouns: a. W 5 Zaar *pəri* 'piece of traditional cotton cloth'; 7 Karfa *àpaar* 'mat, blanket' [RC]; 4 Gude *píri-tyá* 'handkerchief-like cloth'; E 3 Tum *pár-tà* 'tissu'.

b. E **\*par-d- 'loincloth':** 2 Lele *párdà*; 4 Mawa *parda* 'pagne, couvercle'; 5a EDng *pārdà* 'la pagne' (possibly, a loan).

//Eg pry Totb 'die Binde' [EG I: 531] > Sem Hbr *pə'ēr* 'head-dress, Kopfbinde' [KB: 750].

The following forms may be taken for derivatives (note a tenable semantic shift: 'to wrap' > 'to turn around, twist').

Deriv. in *-d-* (directional aff.): C 5a Lmn *pər-dá* 'to fold (hands)', 5 Pod *pəṛə-də* 'tordre', *pəṛə-dá* 'dislocated joint'; 7 Mofu *-párd-* 'se fouler (membre), (se) tordre'.

Deriv in *-t-* (complete action): C 10 Azum *prata* ‘to twist, convulse’; E 1 Kera *pérté* ‘drehen, knicken, tourner, courber’.

Derived noun in *-t-*: ‘to turn, dislocate’ + ‘person’ > ‘a joint’ (see №528): C 3 FK *pír-tà* ‘hoof’; 4 Gude *párà-tì-nà* ‘hoof of an animal’; 7 Zlg *pípìri-t* ‘poignet’, Mbuko *vérrǝ* ‘poignet’.

**538. \*pVr- ‘to hunt, to search’:** W Hs *fàafarà* ‘to persue, chase’, *fàrautà* ‘to hunt by a number of people’; 2 Grk *pra* ‘to chase’ [BIY]; 7 Bokos *faar* ‘suchen, jagen’ [JgR], DB *faar* ‘to hunt’ (irreg. initial, prob. < Hausa) [RC]; C 1 Gaa *pàrà-* ‘to follow’ [MN]; 3 Kap *puri* ‘hunting’ [Kr]; 7 Mofu *-pápar-* ‘poursuivre qqn en le disputant’, (deriv.) *-pàrh-* ‘chasser, renvoyer, répudier’, Mbuko *péra* ‘suivre’; E 5b cf. Mubi *fàrà-n-gàtá* ‘chasser (animaux)’ [JgM].

Deriv. in *-n-*: W 2 Grk *pra-ne* ‘to drive away’ [Fp]; 5a EDng *pári-ñé* ‘chasser, poursuivre le gibier’;

Derived noun: C 7 Mafa *mé-pér* ‘chasse aux oiseaux’; E 5a WDng *pàrààm* ‘chasse isolée’, *pàrmè* ‘petite chasse’ > (denom. verb) ‘chasser de façon non organisée, de nuit ou de jour’.

//Sem Akk *pàru* (OA (?) OB) ‘suchen’ [AHw: 836], ‘to look for, search for, check, inspect scrutinize’ [CAD p: 210], Om Shin *p’e(e)ra* ‘to hunt’ [BnO: 341], Berb Shilh *furu* ‘espionner, guetter’ [NZ: 603]. [StH: VIII.5].

**539. \*pVr- ‘to cut’:** W 2 Mghv *pyéer* ‘to cut, slice’ [BIM]; 3 Tng *pure* ‘to prepare the field by cutting down trees; to fell a tree’, *puure* ‘to cut (or break) smth into pieces’; 4 Miya *pàr* ‘to cut, slaughter’, *papàra* ‘to cut many, slaughter many’ [ShM]; C 3 Hya *prawe*, Kap *prowu* ‘split (wood)’ [BIH]; 9 Mnj *pìri* ‘couper à ras de sol’ > *pìr-ti* ‘to cut with a sickle’; E 2 Lele *por* ‘couper’.

//Sem Akk *parā’u* (a/jB) ‘durch-, abschneiden’ [AHw: 832], (OA, OB) ‘to cut through, sever, slit’ [CAD p: 181], Arab *fry* ‘tailler, couper’ [BK II: 588], Berb Ghad *efru* ‘être cassé, déchiré; se casser, fendre’ [NZ: 607].

Note the next isoglosses as possible derived nouns.

**a. \*p/i/r- ‘kind of razor’:** C 2 Bura *per-ku* ‘razor blade’ [BIB]; 3 Bana *pìrà* ‘rasoir, lame’, FK *pìrú-kú* ‘razor’; 10 Dari *pàrà* ‘throwing knife’; 5a Mig *péèrú* ‘couteau’.

**b. \*par- ‘sickle’:** C 7a Skn *parpar* ‘ceremonial man's sickle’; E 1 Kera

*páará-m* (with an a suff. of instruments) ‘sickle’.

//Berb Maroco dial. *tafrut*, *tafra* ‘couteau à manche de bois’, Wlmd *tafrut* ‘petit couteau’, Qab *tafrut* ‘couteau’ [NZ: 606].

Derived verbs: a. \**pVrVç-* ‘to cut, split wood’: C 7 Muy *ápùrcāy* ‘to cut up’, *prāc* ‘chip of wood’; E 4 Saba *pirisa* ‘to split wood’, Sok *purse* ‘to split’, Mawa *perseŋ* ‘fendre (ex. bois)’; 5a WDng *pàrsè* ‘couper un branche (au couteau)’.

//Sem Arab *frš* ‘couper, fendre en deux’ [BK II: 572], Geez *faraša* ‘break open, cut open, split’ [LsG: 167].

b. \**pVrVč-* ‘to cut (throat)’: C 7 Mbuko *puroč* ‘manière d’égorger’, Mofu *-pārč-* ‘couper (au couteau, à la faucille)’; E 4 Ubi *perže*; 5a Mabire *perče-k* ‘fendre’ [HuJ].

//Cf. Sem Arab *frt* ‘percer, crever et vider’ [BK II: 560].

c. C \**pVrak-* ‘to split in two’: 4 Gude *purakə* ‘to split in two’; 8 Makari *parak* ‘to cut clean in two’ [ALM]. A loan?

//Sem Arab *frq (u)* ‘fendre et séparer en deux’ [BK II: 582], Old Aram, Jud Aram *prq* ‘to cut off’ [JH: 943].

d. C 6 Buwal *pret* ‘to split’// Sem Arab *farrata* ‘separate’, HbrPb *pāraṭ* ‘split’, Aram-Syr *pəraṭ*, Mand *prṭ* [LsG: 167].

Note W 1 Hs *fīr-dēe* ‘to split firewood’, *fār-dā* ‘to slit open the front of an animal, bird, person’ (-*rd-* < -*rt-* ?).

The following forms are cognate (for the link of ‘to cut; & ‘to scratch’ cf., eg., Amh *farä* ‘scratch, carve (wood)’):

W 2 Grk *k-par* ‘to shave’ [BIY//Berb Ahag *afr-ən* ‘to shave, cut hair’ [NZ: 606].

Derived verbs: E 1 Kera *pirki* ‘kratzen, to scratch’; 5a WDng *pòrkè* ‘égratigner’.

Cf. C 4 Gude *pùràsá* ‘scar on the back of head’.

[AA 1 №28 (ECh only)].

**540. \**pVr-* ‘to peel, shell’:** W 1 Hs *féerà* ‘to pare off outer surface of a rind’; 4 Wrj *puri* ‘to take a portion of the bark off a tree’, *pura-kai* ‘act of...’ [BIS]; C 9 Mnj *piri* ‘éplucher’, Mulwi *píri* ‘écorcher à la hache’; E 4 Mawa *puru-ŋ* ‘to peel, bark’; 5a WDng *pèerè* ‘décortiquer’, EDng *péré* ‘décortiquer, écosser, écorcher, enlever la peau’, Bid *pir* ‘décortiquer l’arachide’, Mig *píráw* ‘enlever la coquille, le peau’, *páráw* ‘devenir chauve, épiler, devenir lisse’.

Deriv. in -*d-* (directional): E 5a Bid *perèd* ‘décortiquer’. For a derived

noun cf. Bid *pàráada*, EDng *pàrdā*, WDng *pàrdé* ‘écorce’.  
 Deriv. in -g-: E 5a WDng *pīrgé* ‘décoller, écorcher la peau d'un animal, fruit’. Cf. C 10 Dari *pūrūk* ‘effacer’.  
 //Sem Geez *frr*, *farra* (yəfrər) ‘to shell, husk’, Amh *frr* ‘remove’ > *farä* ‘to shell’, Aram (Syr) *par-t-* ‘husk, seed-shell’. According to Leslau, cognate with Arab *frr* ‘to break’ [LsG: 166], Off Aram *pr* pl. ‘bran’ [HJ: 934].

**541. \*pVr- ‘to say, cry’:** W 3 Bol *poru* (plac. *pogiru* < *pokiru*, internal -k- pl.) ‘to say, tell’ [LkB, GAB], Pero *péro* ‘to announce by shouting’, Kupto *fêréy* ‘to say, tell, assert’, Maka *pòráayò* ‘explain’ [SvP]; 4 Miya *paara* ‘cry, to make a cry’ [Sch]; C 2 Klb *pàri* ‘to relate a story’ [MuK], cf. Bura *pəla* ‘to say, speak, tell about’ [BlB]; 9a Gdr *pél* ‘to talk’ [FrG]; E 4 Mawa *pəarəŋ* ‘discuter’.  
 Deriv.: W 1 Hs *fúrtà* ‘to speak, mention’, *firičii*, *fúričii* ‘speech’.  
 //Berb Ahag *tafirt*, Wlmd *twfwrt*, Ayr *tefirt* ‘mot, qq paroles’, Ghad *tafirt* ‘mot’ [NZ: 608f] < Hs?

**542. \*pVr- ‘to look, see’:** C 7 Gis *por* ‘sehen’, Zlg *pàr* ‘voir, noter, examiner’, Ould -*pārəŋ* ‘voir’; E 2 Lele *pār* ‘ouvrir(les yeux)’.  
 Deriv in -t- (complete action) : C 9 Mlw *pìrti* ‘écarquiller les yeux’; E 5a Bid *pirat* ‘écarquiller les yeux’.  
 Cf. E 5a WDng *pìrnyè* ‘regarder par un trou’.  
 //Cf. ECush Som *fiiriyey* ‘look at, ponder’ [LIS], Rend *fiiricha* ‘to observe’ [PG]. [HSED №1954].

**543. \*pVr- ‘fear’:** W 5 Tala *pùri*, Zaar *vər-tə* [Cs]. Cf. W 1 Hs *färfärwà* ‘trembling’.  
 Denom. verb: C 7 Mbuko *péran* ‘effrayer’; 6 Daba *pàrát* ‘avoir peur’.  
 //Sem Geez *farha* ‘be afraid, fear’, Eth Tgr *fāraha* ‘fear, be afraid’, Tna *färhe*, etc., [LsG: 165f], Cush dull Harso, Dob *fiur* ‘Angst haben’ < Eth-Sem, Arab *nfr* ‘être peureux’ [BK: 1307], Akk *pardu* (fem. *parittu*) ‘frightened, confused’ Mari, SB [CAD p: 182].

**544. \*(?V)pVr- ‘to untie, unfold, release’:** W 2 Ngas *piir* ‘to extend (wings), unfold cloth’ [Fl]; 6 GBade *pəlpəlu*, WBade *pərpəru* ‘to untangle’; C 1 Tera *pári* ‘to untie’ [NmT]; 2 Bura *mpili* ‘to loosen, untie’ [Ann], Klb *mpəliyə* ‘to untie’, *mpəl* ‘to untie, loosen’ [MuK],

Chb *mpìli*, Hld *pul-nā*, Mrg *pil-nà* [Kr]; C HN *pil-unte*, FK *p(ə)lá-cá*, HB *pìlu-ndò*, HGh *plì-ndé*, HF *pələ-nto* ‘to untie’ [Kr], Bana *pàlí* ‘déplier, détacher, étaler, déballer’, FK *mpál* ‘to untie, loosen’ BIFK]; 4 Gude *pə̀rə* ‘to untie, unfold’, Bch *para* ‘to untie’ [Sk], FJ *pila-bì*, FM *piri*, FBw *pir*, Mwl *ùpùrán* ‘to untie’ [Kr]; 5 Mlg *pála* ‘(sich) lockern, aufknoten’, Pod *pə̀la* ‘détacher, relâcher, untie, release’, Dghw *pùl-nayà* ‘to untie’ [Kr]; 5a Hdi *pə̀lay* ‘to untie’, Lmn *pə̀la* ‘to untie, release, spread’; 6 Daba *pəl* ‘détacher, déplier’, Mbedam *pəl* ‘détacher’ [NdP], Mina *pəl* ‘to detach’ [FrJ]; 7 Mafa *pər* ‘déliier’, Ould *-pəl* ‘se détacher’, pl. *-pəlāy* ‘se détacher a plusieurs points’, *-pələy* ‘détacher, dénouer’, Zlg *pəl* ‘se détacher’, Cuv *mépələy* ‘défaire un toit en paille, délier, étendre’, Muy *épəl* ‘unwind’; 9 Mnj *pili* ‘déliier, détacher’; 9a Gdr *əppə̀la* ‘détacher’ [Schuh]; E 1 cf. Kera *féré* (irreg. reflex of *\*p-*) ‘losmachen’, Kwn *apre* ‘to untie’; 2 Lele *pòr* ‘détacher, dénouer’, Nch *pure* ‘to untie’ [Nm]; E 4 Mawa *əparaŋ* ‘déliier, détacher’; 5a WDng *ipìrè*, Mig *’ipiró* ‘dénouer, détacher’, EDng *ipiré* ‘détacher’, *pirriyè* ‘dérrouler, étendre’; 6 Mok *’əppirè* ‘détacher, liberer, délier’.

Derived verbs: W 6 WBade *pə̀rtu* ‘to unravel, undo woven thing’, Ngz *pə̀rtú* ‘to undo, take apart’; C 7 Mada *əppas* < *apras* (regressive assim.) ‘déliier, détacher, découdre, défaire’; E 5 EDng *pirnyè* ‘écarter, ouvrir (écarter la paille pour voir à travers un charginier)’.

[Nm CCh *\*pira* ‘to untie’, including kotoko *f-l/v-l* [GrR], AA 1 №36 *\*pr* ‘to untie’ (Tera, Dng, Mig, Nch), for CCh ‘to untie’ see CED №611 *\*pVI-* ‘to separate, to untie’, TN №442 *\*p-l* ‘to separate, open, untie’]. //ECush *\*fur-* ‘to open, free, untie’: Rend, Boni, Dasenech, Burji, Gidole, Konso *fur-* [Ss: 20], Som *furay* ‘to open, divorce, set free, untie’ [LIS], Oromo *fura* ‘to release (from fetters)’ [Grg], Berb Qab *ə-fru* ‘to untie’ [NZ], Sem Soq *nfr* ‘déliier, racheter (redeem?), sauver’, Arab *nfr* ‘fuir et se disperser (se dit d’une troupe d’hommes)’ [BK II: 1307]. The next root may cognate.

**545. *\*pVr-* ‘to begin’:** W 1 Hs *fáarà* ‘to begin, start, be the first to do’, *fáari* ‘beginning, first’; C 6 Mina *pər* ‘first’ [FrJ]. Cf. W 3 Pero *péerè* ‘place of origin, source’ (= Pero?).

**a. *\*(a)pVr-* ‘dawn’:** W 2 Grk *parr* ‘dawn’ [Fp]; C 9 Msg *par* ‘früh, early’ [LkM]; 10 Gizey, Masa *pír*, Ham *píi* (< *pir*, compensatory lengthening) Lew *pípír* [LexC], Musey *piipiira* ‘aube’ [ShyM], Azum *pipira* ‘at dawn’ (compens. redupl.).

Some more verbs seem to be Hausa loans: W 4 Miya *faara* ‘to start, begin’ [Sch], Tsagu *paar n* [SkH]; 7 DB *fàrày* ‘to begin’ [JgR].

//Cush Afar *fir* ‘Anfang, Beginn’, *fawir* ‘an der Spitze stehen, zuerst tun oder sein, anfangen, beginnen; to begin, start’ [RA], Berb Taneslemt *affar* ‘commencement’ [NZ: 610].

**546. \*pVr- ‘to separate, choose<sup>53</sup> > divorce’:** W 3 Tng *pər* ‘divorced’; C 6 Mina *palay* ‘to choose’ [FrJ]; 7 Chuv *mépélèy*, Mol *palay* [FrM] ‘to choose’; E 5a WDng *pàrè* ‘se diviser en deux équipes, deux partenaires’, Mig *píráw* ‘séparer (des bagarreurs)’, *’ápiró* ‘to choose’; E 1 Mobu *páaré*, Ngam *pàare* ‘to choose’; 6 Mok *péerè* ‘se séparer, divorcer’.

Cf. C 6 Gavar *parpar* ‘different’; 7 Muy *pràs* ‘in different directions’.  
//ECush Som *feeraariyey* ‘separate, move apart’ [LIS]. For confusion of semantics ‘to untie, release’ & ‘to divorce’ cf. Som *fur* ‘to open, divorce, set free, untie’.

a. Deriv. in *-g-*: C 5a Bid *pirgày* ‘séparer’, EDng *pèrgiyè* ‘séparer, diviser, distinguer’.

b. Deriv. in *-k-*: C 8 Log *prukun ala* ‘to divide, separate’, *prekel zi a* separate, become separated’ [AIL]; E 5a WDng *pìrkiyè* ‘distinguer’.

//Cf. SCush Irq *paraatl* ‘to separate, put apart’ [MKQ].

**547. \*par- ‘granary, part of the granary’:** W 2 Goem *pàar* ‘barn, platform raised on sticks’ [Hlw]; C 4 cf. Gude *pìirá* ‘wall inside granary’; 10 Dzpw *bēbé pàr* ‘porte’ = ‘hole of the house’; E CF. 2 Lele *pāré* ‘kind of cage’; 5a Mig *pàrá* ‘hangar’.

Deriv in *m-*: C 7a Skn *ma-param* ‘gateway, house of stone’.

//Eg *pr* (Pyr) ‘Haus, Laube aus Rohr, Palast des Königs’ [EG I: 511], Berb Ahag, EWlmd, Ayr *afarra* ‘clôture (haie, mur)’, Ahag *tâfré* ‘petit mur en pierres dèches’, Snus *afri* ‘to fence’, Rif *affray* ‘haie’ [NZ: 608, 648]. Note Sem Akk *nupāru* (OB) ‘workhouse’ [CAD n2: 341, Cush Sid *nafara* ‘compound’ [KS: 19]. [AA 1 №30: Eg+Berb].

**548. \*pur- ‘coarse (thatching) grass’:** W 1 Hs *fūrfúráa* ‘a grass used in making mats’; 3 Bol *puro* ‘plant used as fodder, stalks - for roof thatching’ [GAB], Krkr *fūrò* ‘kind of tall grass’ [GK], Kupto *fūròfūrò*

---

<sup>53</sup> For the linking of ‘to separate’ & ‘to choose’ see Sem Geez, Hbr *brr* ‘separate, choose, select’ [LsG: 107].

‘grass sp’ (< Hs?), Pero *pùrè* ‘grass for roofing’; 6 Duw *puura* ‘coarse tall grass with fluffy flowering heads, used for thatching’; C 4 Gude *pàrà* ‘grass for mats’. Cf. 7 Mol *mpapar* ‘grass fence’ [FsM]; 2 Bura *parapara* ‘wood stalk of the palm branch’.

//Cf. Berb Shilh, Rift, Qab, etc. *afar* ‘chiendent, crabgrass’, Figig *affar* ‘herbe’ [NZ: 599].

**549. \*pVr- ‘tendon’ > ‘vein’:** W 2 W 2 Ngas *peer* ‘tendon, ligament’ [Fl], *mpèer* ‘nerv, sinew, vein’ [JgN], Mpn *pàar* ‘vein, tendon, muscle’, Mghv *paar* ‘artery’ [BIM], Chip *par* ‘vein’ [Kr]; 7 Fyer *pyer*, Tambas *per*, Monguna *fer a žol* (*žol* ‘hand’) ‘vein’ [RC]; C 2 Mrg *pur-da* ‘vein’ [Kr], Bura *pur-dà* ‘tendon, nerve, blood-vessel’ [BIB] [Kr]; 5 Mlg *pàr-da* ‘Sehne’, Wnd *pur-dà* [Kr], 5a Lmn *prá-tá* ‘vein’ [Wff].

**550. W \*pu/ir- ‘type of (small) bird’:** W 1 Hs *fúrii*, *féeríu* ‘the name of a small bird’; 3 Bol *pìiri* ‘a black bird, that lives in wells’ [GAB], Krkr *fíiríi* ‘type of bird, lives in wells’, *fírfír* ‘francolin’ [GK]; 6 Duw *pìiri* ‘a black bird, that lives in wells’ (< W 3?), GBade *pìiri*, WBade *pìiràn* ‘starling, oxpecker’.

a. **\*pVr-pVr- ‘kind of flying insect’<sup>54</sup>:** W 5 Grnt *pupur* ‘butterfly’ [Hr]; C 2 Bura, Klb *pərpər* ‘butterfly’; 3 Bana *pəlpəli* ‘papillon’; 4 Gude *pər-pípəri-nə* ‘butterfly, moth’; Mlg *napalpala*; 6 Mbedam *məpulpula* [Nd] ‘butterfly’; 7 Mofu *péper* ‘moustique sp.’; 7a Skn *mužə-pərpər* ‘butterfly’; 10 Musey *piipiira* ‘le papillon’ [ShyM]; E 5a Mig *pìrpìr* ‘moustique sp.’, Bid *papiro* ‘insect sp.’. Cf. W 3 Kupto *fùr-máa-fùr* ‘butterfly’.

//SCush rift Irq *piryo* ‘small bird’ [MQK], Sem Geez *fərfərt* ‘quail, (K\*) night moth, butterfly’, Arab *fírr-at-* ‘quail’, *furfur* ‘small bird’, Hbr *parpar* ‘butterfly’. Accord. To Leslau, the following forms derive from *frr*, *fífr* ‘to flatter, quiver’: Geez *fífr* ‘thrash about, flail about, move convulsively’, Eth ‘writhe, flop around, agitate’, etc.), Eth Tgr *fərfərat* ‘a bird’, Amh *fərfərt* ‘partridge’ [LsG: 165], Arab *furfur-*, *fírfír-* ‘sorte de petit oiseau aquatique’, *fúrfír-* ‘passereau’ [BK II: 582]. Cf. Eg *p<sup>r</sup>.t ~ p<sup>r</sup> ~ pr<sup>r</sup>* ‘Art Geflügel (neben Tauben)’ [EDE II: 431], *pr* OK ‘ein Vogel’ [EDE II: 459].

For Arab-Eg-Hausa see [AA 1 №34].

<sup>54</sup> terms for ‘small bird’ and ‘moth, butterfly’ are confused also in Semitic.

**551. \*pVr- ‘kind of stone’:** W 2 Ngas *pár, pér* ‘type of stone’ [JgN], Goem *pyer* ‘stone for scrubbing the heels’ [Hlw], Mghv *kə-pér* ‘Stein, Kiesel’ (*k-* coll.) [JgS], Grk *k-pàár* ‘gravel’ [BLY], cf. Mpn *pēer* ‘term for any light-coloured stone’; C 3 Higi Humsi *pere*, Higi Moda *pirre* ‘stone’ [Meek], HB *pìre*, FK *péri*, HN *pùre*, Kap *pùre* ‘stone’, HF *pìre* ‘mountain’ [Kr], cf. 4 Bch *fara* ‘stone’ [Meek]; 7 Mafa *mpá-pár* (pl.) ‘pierres plates’, Chuv *pàrà* ‘pierre plate’.

Deriv. in *-d-* (= suff. of sing., cf. Mafa) ‘flat rock’: C 7 Mafa *pàrà-d* ‘rocher plat’, Merey *pàla-d* ‘rocher’, Mada *pla-d*, Muy *plá-d* ‘flat rock’, Ould *pàlà-d* ‘grand rocher plat’, Mol *pàra-d* ‘lage rock’ [FsM]. Cf. E 1 Kera *pár-kí* ‘stone, mountain, hill’.

//Cf. Sem Arab *fìhr-* ‘pierre assez grande pour remplir tout la main et avec laquelle on casse les noix’ [BK II 641].

**552. \*pVr- ‘shoulder’:** W 5 Bgh *pàràp d̄wai* ‘wing’ (*d̄wai* ‘bird’) [Cs]; 6 Duw *pàrdá*, WBade *pàrdá-n* ‘shoulder’; C 7 Baka *piperi* ‘épaule’, Muy *pēēpēā* ‘shoulders’, Chuv *pàr-kʷùlà* ‘aile’; E 3 Tum *pèr* ‘shoulder’, (*d̄ari*) *pàrà* ‘wing’ (‘bird’ + ‘shoulder’); 5b Brg *fèrfèr* ‘shoulder’.

Cf. №510 \*pVI- ‘(upper) arm > shoulder, wing’.

**553. \*pVr- ‘boat; paddle’:** C Glv *pérà* ‘canoe’, Wnd *pere*, Chn *pere* ‘boat’ [Kr], Lmn *páré* ‘boat’ (also ‘wooden board, door’) [Wff]; 9 Mbara *pèrè* ‘side of a canoe’; 10 Masa *púrá*, Musey *pereḡḡa* ‘paddle’ [ShyM], Azum *prau-na* ‘paddle (used with canoe)’; E 1 Kera *paara* ‘Ruder, paddle’. For Lmn ‘board’ cf. C 4 Gude *pàrálówá* ‘wooden bed without legs’.

**554. \*pVr- ‘harmattan, fog’:** W 2 Hildi *parāw* ‘storm’ [Kr]; 4 Bata *pùrá-tò* ‘cloud’ [IL]; C 8 Kus *pori* ‘fog’ [AlK]; E 4 E 4 Mawa *pur-na* 5a Bid *pàrúurùḡ*, Mig *pàrlúm* ‘brouillard’.

a. C \**pur-d/d-* ‘harmattan, fog’: 2 Hildi *purd̄â*, Bura *purdu*, Chb *mpurd̄û*, Mrg *pird̄û*, Ngwahi *purd̄ò* ‘fog, harmattan’ [Kr]; 4 Mwl *pòrd̄i* ‘cloud’, *púrd̄ùò* ‘harmattan’ [Kr].

**555. \*pVr- ‘child, boy’:** W 2 Ngas *paar* ‘infant, baby’, *yem maa paar* ‘a suckling lamb’ [F1], cf. Kofyar *pár* ‘to be in labor’ [apud [TAS: 281)]; E 1 Kera *pur* ‘Junge, garçon’; 5a Bid *pàrpàr-gú* ‘jeune garçon’,

EDng *pòrpóricé* ‘jeune homme pas encore pubère, pas encore nubile’.  
Cf. W 3 Bol *pirpir* idf. ‘a child who is small but clever’ [GAB].

//Sem Akk *nipru* SB ‘offspring’ [CAD n2: 247].

Note that Proto-WSem *\*piry-* ‘fruit’<sup>55</sup> is hardly an immediate cognate.  
Cf. Eg *pr.t* AR ‘Frucht o ä’, A. ‘Frucht einer Pflanze’; B. ‘Same =  
Nachkommenschaft /seed = descendants’. For all possible cognates of  
Eg *pr* see [EDE II: 559-462].

[Coh: 169, Isv: 26].

**556. \*pVr- ‘kind of (big) fish’:** W 1 Hs *f/húràa* ‘the name of a fish’;  
E 1 Kera *párwá* ‘big fish’; 5a EDng *pārpīrā* ‘la carpe’ WDng *párpò*  
‘fish’ gen.

Cf. W 1 Goem *pwár* ‘to fish or take smth from water’ [Hlw], 3 Kupto  
*fártè* ‘fishing (festival)’.

//Cf. Sem Akk *purādu* ‘carp’ Mari, SB [CAD p: 516].

**557. \*pVr- ‘white’:** W 1 Hs *fáriu* ‘white’; 3 Tng *perɔ* ‘white-wash,  
white earth, chalk’; 5 Zaar *paraat* idf. ‘white’ [CrZ]; C 2 Klb *pärtù*  
[MuK], Hld *pürtu*, Mrg *pirtù* [Kr] ‘white’; E 3 Tum *pūri* ‘blanchâtre’,  
cf. ‘briller’; 5a Mabire *pororan* [HuJ], EDng *pūr-tà* ‘blanc, clair,  
immaculé (symbole de la joie)’, Mig *pürtà*, 5b Brg *fóroora*, Mubi *fèrét*,  
Jegu *pórorân* ‘white’ [Jglb].

Denom. verb: W 1 Hs *fárántaa* ‘to whiten’; E 5a WDng *so-pire*  
‘devenir blanc’ (Caus?). Cf. C 7 Muy *prāḡprāḡ* ‘shining’.

//Sem Akk *parūtu*, *paruttu* (a type of alabaster) MB Emar [CAD p:  
211].

[Jglb *\*pr*, for Hs-Mrg-Mubi see ISv: 24].

**558. \*(HV)pVr- ‘red’:** W 2 Mush *paar* ‘redness’ (meaning uncertain,  
apud [TAS: 281]); 3 Tng *pɔrɔl* idf. ‘redness’; 5 Buli *mè-piriŋ* ‘red’ [Kr];  
C 6 Buwal *vʳrè* (< *\*H-pVr-*) ‘to be red’, Daba *pírèn* ‘rouge, rougir’,  
Musgoy *párreŋ*; 9a Gdr *pepréŋe* (compensatory reduplication (< *\*H-*  
*pVr*) [Mo: 37] ‘red’; E 3 Ndam *pàré*, Tum *pàrī* ‘rouge’, *pà* (< *par#*)  
‘être rouge’; 5 WDng *pòròny* ‘rougeâtre’.

//Sem MSA *\*pr* ‘red’: Soq *‘áfer*, Mhr *‘ófer*, Jib *‘ófer* ‘red’, Arab *‘afira*  
‘avoir le pelage rougeâtre’ [LsS: 320]. Cf. Geez *ferä* ‘pestilence,

---

<sup>55</sup> Ug *pr* (*pry*), Hbr *pārī*, Geez *fāre*, etc. [Kg: 201].

plague' (T: 'blood') [LsG: 165].

Deriv.: **\*H-pVr-(m)- 'blood'**: W 4 *\*pəram-* (< *\*HpVr-m-*, note *-m-* as a body-part' marker): Siri *pəramí*, Mburku *pəran*, Miya *pəram*, Jmb *bəramá* [SkNB], Miya *pəram* [Sch]; 5 Kir *pirəŋ*, Tala *prà* [Smz], Grnt *bàran*, Jimi *biram* (*b-* < *-p-*) [JgIb], Mng *puruŋ* [Cs], Plc *burán*, Zul *bəraani* [Cs №45], Dott *bəraan* [CrD], Zaar *vòrəŋ* [CrZ], Buli *piriŋ* [Kr]; C 1 *\*f/vVr-* < *\*HpVr-*: Tera (dial.) *vər*, Gaa *fera*, Gbn *ferē*, Hona *farà*, Boka *fwùra* [Kr]; 9 *\*fVl-* (< *\*HpVr-*) Msg *fēel* [LkM], Mnj *fèl*, Mbara *fâl*; E *\*bVr-* (< *k-pVr-*): 1 Kera *kor* (< *\*kV-bVr-* < *\*k-pVr*, note *k-* as a suff. of collective nouns), Kwn *kú-wáar* < *\*ku-bar* [JgIb]; 2 Kaba *ka-brə*, Nch *ku-bra* [HmK]; 3 Tum *bà* (< *\*-bar#*), Smr *bàrē*, Ndam *bā:r* [JgIb]; 4 Barein (dil.) *baar-*; 5 Mig *báará* pl., WDng *bààr* pl. coll., EDng *báari* pl., Mabire *bar* [JnH], 5b Kaj *ʔàbàr*, Jegu *bar*, Brg *bàrà*, Mubi *òbòr* [JgIb].

Derivatives: W 5 Buli *mè-piriŋ* 'red' [Kr]; E 5a Bid *baar* 'rougir'.

//Cf. Cush Agaw *\*bər-* 'blood': Bilin Hamir, Kem *bər*, Awiya *bəri*, [ApAg], Arb *burri* 'red' [Hay]; Omot Shin *birá* 'rot' (Cush and a few Chad parallels) [LmSh].

[JgIb *\*br*, Nm *\*bar* 'blood'].

**559. \*pVr- 'many'**: W 1 Hs *fàri* 'in large numbers with intervals between them', *fàràrà* 'in immense numbers; of immense area'; 6 Duw *pəra* 'all'; C 7 Mada *pérpér* 'en grand nombre'.

//Sem Arab *wafr-* '1'abondance, richesses; nombreux' [BK II: 1575].

a. C **\*pir-** 'to fill, (be) full': C 3 Kap *pire* 'to fill' [Kr]; 6 Buwal *péré* *péré* '(be) full to overflowing'; 8 Makari *per* 'full' [AlM].

## Fragmentary isoglosses./ Фрагментарные изоглоссы

### Chadic \*b-

1. C \*bVy/w- 'to wait': 3 FK *mbúó* 'to wait'; 7 Mbuko *bà* 'attendre'; 9 Mbara *bìyì*, Mj *biyi* 'attendre', Msg *be* 'warten' [LkM]  
//Cf. Sem Arab *bwy* 's'arreter, faire halte dans un endroit' [BK I: 181].

2. \*bVy- 'white(wash)': W 5 Dott *biyu* 'white coloured earth used to plaster walls' [CrD]; C 8 Makari *boya* 'lime, whitewash' [AIM].  
//Cf. Eg *by.t* 'Bezeichnung des Alabasters from Hatnub' AR, MR [EG I: 433].

Cf. №20 \*bVw- 'milk', 20a. \*bi'w/y- 'white'.

3. \*baw/y- '(to) bark': 1 Hs *báawóo* 'bark, shell, rind'; C 6 Buwal *bāw* 'to peel away'.

4. W 2 \*HVbwVp 'kind of fish': Ngas *bwoop* [Or], *buup* [Fl], *m̄bup* 'fish' [JgN], Mpn *púpwáp*, Mghw *púpwáp* (compensatory redupl.) 'fish sp.' [BIM].  
//Eg 'wbbw MR 'Art Fische' [EG I: 172], Soq 'aaba 'a carp-like fish' [EDE IINº 27],

Cf. C 8 Log *bwabwa* 'fish'; E 4 Sok *buuwi* 'fish' [Bn] //Eg *bw.t* AR 'Art Fish' 453, // EDE II 175

5. W 3 Grm *bèeyí* 'horn' [SchB] // Eg 'b 'das Horn' 173 (NR 'Stachel des Skorpions);

a.W 1 Hs *bóoyóo* 'a spear'; 7 Fyer *bubo* (compensatory redupl.) 'spear, lance' [RC] //Eg 'bb.t MR 'Speer' [EG I: 178 ].

6. C \*bVd- 'to deceive, flatter': 5 Mlg *báda* 'verführen, täuschen; to seduce, deceive'; 7 Muy *ábàdāy* 'to flatter, trick'. Note C 7 Mafa *mbid-* (< *bVdVH-*) 'tromper'

//Sem *bd'*: Hbr *bādā* 'inventer, imaginer', Aram JP,Syr *beda* 'inventer, mentir' [DRS: 44], Off Aram *bd'* verb. poss. meaning 'to devise falsehood' [HJ: 144], Soq *béde* Mhr *bedú* 'mentir' [LsS: 82].

7. \*bud- 'duiker': C 6 Daba *bùdà* 'cob de rosseau'; E 6 Mok *búdi-só* 'duiker'[JgIb]

//Cush Afar *be'idaa* Sa id, Som *be'id*, Das *beza*, Antilope oryx' ]RAf],

8. C \*bud- 'tax': 2 Mrg *búdù* 'tax' [HfM: 22]; 7a Skn *budə* 'tax'.

For a possible deriv. in *m-* cf. C 5a *\*m-bVd-* ‘to count’: Hdi *mbaday*, Vemgo *mbada*, Lmn *mide*, Gvoko *māda* [CH].

//ECush Som *baad* ‘tax, tribute, protection money’ [LIS]

**9. *\*bVd-* ‘reed’:** W 3 Tng *bada* ‘stalk, reed’, Bol *bàdà* ‘round cornstalk hut’ [GAB]; 4 Miya *bàday* ‘large basket’ E 2 Lele *bùdū* ‘réciipient en vannerie’.

Denom. verb: C 4 Gude *mbəədə* ‘to weave grass stalks’.

**10. C *\*but-* ‘to be without’:** C 5 Pod *búta* ‘gencive sans dent’; 8 Log *bútu* ‘leer, nakt’ [LkL].

Deriv.: W 6 Fyer *bubwāt* ‘verlieren, to lose’ [JgR].

**11. W *\*bVt-* ‘gourd’:** 1 Hs *búutà* ‘water-jug, a bottle-shaped gourd’; 3 Gera *mboota* ‘gourd’ [SchB]; 3 Tng *báte* ‘gourd’

//ECush ‘pumpkin’: Oromo *bota* Tsam *boote*, Gol *poote* [AMS], Arb *bóte* [Hay].

**a. *\*bat-* ‘kind of vessel’:** C 7 Ould *mbàt* ‘poterie sacrificielle’. Cf. E 5a EDng *bāt-kā* ‘le tesson de poterie’.

//ECush Brj *bóta* ‘big pot’, Had *baat-a’a* ‘a very large clay pot’ [SsB], Afar *búti* ‘Kochtopf’ [RA].

**12. W 2 *\*bVt-* (< *\*bVt-*) > *\*bVkVt* (internal *-k-* pl.) ‘to tie, to imprison’:** Ngas *baat* ‘to tie, bind’ [F1], *baat* ‘to tie, bundle up’ [JgN], Mghw *bwayat* ‘to tie, imprison’ [BIM], Goem *bóot* ‘to tie or bind smth, wear smth (by tying), imprison’ [Hlw], Mpn *bwāat*, Mushere *bwakat* ‘to tie’ [JgO], Mnt *baad-ni* ‘to bind’ [F1], Chip *bòkət* ‘to tie’ [Kr].

Derived noun: Ngas *baat* ‘the webbing made by the Angass used as girths or breast straps’ [F1], Mghv *bwàyàt* ‘bundle’.

//Sem Akk *ebētu* ‘to be tied, girt; to have cramps’ OA, OB on [CAD e: 13], Aram Mnd *abt* ‘bind, hold fast’ [LsG: 55]. Cf. ECush Oromo *battee* ‘rope’ [Grg].

**13. *\*bVt-* (< *\*bVt-*) ‘anus, bottom’:** W 1 Hs *búutiyya* (*bVt-*<*\*bVt-*) ‘anus’; cf. Cf. C 5a Lmn *mbùt-* ‘bottom’ [Wff].

//Sem Aram (mand) *buṭa* ‘anus, derrière’ [DRS: 51 *bwṭ*], Berb Nef *buṭa* ‘anus, derrière’, Fig *buḍ* ‘fesse, anus’, Izn, Cha Snus *buḍ* ‘fond’, Mzab *buḍ* ‘fond, cul’, etc. [NZ: 28f].

**14. W *\*bVy/g-* ‘to search, look for’:** 1 Hs *bàgoo* ‘surrounding anyth it is desired to catch; lurking, lying in wait’, 5 Bogh *bayayéi* ‘to

look for' [Cs №713].

//Sem \**bgy*: OldAram *bʿy* 'to search for, look for, want' [JH: 180], Hbr *bʿy* 'to inquire', Arab *bgy* 'demander, désirer une chose' [BK I: 147], Mehri *bgy* 'to desire' [JM: 44], etc. see [DRS: 76].

Cf. [TN №103].

**15. C \**baw*-** (< \**bVH*-, see below) 'to gather': 4 Mwl *úòwò* 'to gather' [Kr]; 10 Dzpw *há* 'ramasser, entasser'.

//Berb Nefusa *ebbi* 'ramasser, cueillir, récolter' [NZ:144].

**a. C \**bVh*-** 'to gather, be plenty': 2 Bura *buha* 'to gather things at one spot' [BIB]; 3 FK *bàbàxà* 'plenty, several'; 7 Mada *mbàáh* 'à flots, en foule'.

**16. C \**bVy*-** 'to be(come) warm': 6 Buwal *bōxʷbōxʷ* (*bVxbVx* > *bVxbVx* > *bVxbVx*) 'to be warm'; 3 Bana *bàγà-ḱi* 'se chauffer'.

**17. C \**buhʷal*-** 'deer': 7 Mafa *búhʷál* 'biche sp.', Cuv *pàhʷəl* (regress. devoicing) 'biche'; 10 Lew *bùhù*, *búhʷál* 'biche sp.' [LexC].

//Cf. Berb Ahg *abaxul* 'chameau de charge', Ghat *abaxul* 'vieux chameau' [NZ:141. For the origin of Berb forms see [Bel, № 34, стр. 99-101].

**18. C \**mbVgVw/y*-** 'pumpkin': 5 Mlg *mbégʷa* 'Kurbis'; 8 Kus *mbeigu* 'pumpkin'.

//ECush Ong *bagaye* 'small portable container for water' [SaT].

**19. \**bVg*-** 'kind of food (made with flour)': W 1 Hs *bágaayii* 'a food which is made with bulrush-millet flour'; C 9 Msg *bəg* 'Mehlbrei' [LkM].

**20. E 5a \**bag*-** 'to dry, to become old': WDng *bàgìyè* 'sécher (feuilles), dev. vieux', Bid *bàgìy-àṅ* m., *bàgáy-ma* f. 'vieux, âge'.

//Sem Geez *baggʷa* 'be the dry season', "probably a denom. from Amh *bäga* 'dry season' in a reconstructed Geez form" [LsG: 88].

**21. C 3 \**m-bVg*-** 'spear': HF *mbùgà* [Kr], Higi Moda *mbaga* 'spear' [Meek].

//Sem Arab *bgg* 'percer (avec une lance)' [BKI: 85]; Berb Shilh *bgu* 'percer, trouer, creuser' [NZ: 33].

**22. W \**bVg*-** 'to lie, liar': 1 Hs *bùigaa* 'a liar'; 3 Tng *bugε* 'to deceive'.

//Sem Geez *bagbaga* 'calumniate, slander' (without reliable cognates

in Semitic) [LsG: 88].

**23. C \*bak- ‘to watch’:** 3 FK *bàkà* ‘to watch’; 7 Mofu *bák* ‘regarder (un jeune homme)’.

//Cf. ECush Oromo *beek*, Gide’o *beek-* ‘to know’ [LmSh].

**24. C \*bak- ‘to shine, to bloom’:** 7 Ould *-bàkò* ‘briller, fleurir’, Mada *óbbòkwó* ‘fleurir’;

a. C 7 Mada *àbàk* ‘jour’; 10 Dari *bàkà* ‘jour, matin’, Dzp *bàgà* ‘matin’.

**25. C \*(m)bVk- ‘hen’:** 3 FK *mbàkà* ‘duck’, *mbàkwàná* ‘hen’; 7 Gis *bokoy* ‘Hahn’.

Cf. W 2 Mpn *bwák* ‘to peck’ ( a denom. verb in ?a-?)

//Om Shin *baaka*, Kaffa *bakko*, Sheko *bakku*, Ari *baca* ‘Hähnchen’, cf Cush Hadiya *anta-bakkiččo* ‘Hähnchen’ [LmSh].

**26. C 10 \*bVk- ‘vulture’:** Azum *àbaka* ‘species of eagle’, Dzpw *bòk* ‘marabout, vautour’, Masa, Musey *bak-*, Peve *bwok* [Shy], Mesme *bok* [Kr] ‘vulture’. Cf. 9 Mgs *begéš* ‘vulture’ [LkM].

//Eg *byk* ‘die Falke’ [EG I: 444]. Cf. [HSED №356, EDE II: 149].

**27. W 2 Mghw *búk* ‘fine dust’ [BIM]; 3 Gera *bùbùkà* ‘dust’ [SchB].**  
Ch forms may be of different origin, note: Sem *ʔbq* ~ Cush *\*buko*.

//Sem Hbr *ʔābāq*, Aram Syr *ʔabqā* ‘poussière’ [DRS: 4], PHEC *\*buko* ‘dust’: Sid, Gede’o *bukk-o*, Burji *buho* [Hds], Berb Ghd *tabékka* ‘poussière de terre desséchée’, Ahag *taboqqa* ‘poussière’ [NZ: 46, 85].

**28. \*bVḵ- > \*ḶVk- ‘to nail’:** C 7 Mada *ábak* ‘clouer, fixer’.

Derived noun: E 2 Kera *Ḷakay* ‘harpoon’

//Sem Arab *baqaʿa* ‘to pierce’ [LsG: 100].

**29. \*bVḵ(w) > bu/ok-:** W 3 Ngm *bùkò* n. ‘spring (water)’ [NEH]; E 5a Bid *bok* ‘jaillir’.

//Sem Arab *bqq* ‘verser beaucoup de pluie’ [BK II: 148], Cush agaw *\*bəqw-* ‘flow, pour out’, ECush Som *buq* ‘source of stream; spring’ [LIS].

**30. \*bis(s)- ‘to marry’:** W 3 Bol *bissu* ‘to marry the wife of a deceased older brother’; C 8 Zina *bisà* ‘to marry’.

//Cf. Sem Arab *bsʔ* ‘devenir familier, intime avec qqn’ [BK I: 124], cf. Cush Arb *bays-* ‘sister-in-law’ [Hay].

Note *\*bus(s)- ‘to divorce, drive away’* : C 10 Mus *bussa* ‘rompre une alliance ou une amitié; divorcer, la divorce’ [ShyM]; E 1 Kera *bùusí*

‘divorcer, répudier, sich scheiden, verstossen’.

**31. \*bas- ‘health, strength’:** W 4 Paa *bàsá* ‘health’ [MS]; E 2 Gbr *basua* ‘stark’ [Luk]

//Sem Arab *ba’usa* ‘be strong’, Geez *bə’sa* ‘grow (mature), be strong’ > *bə’asi* ‘man, male, husband’, *bə’asit* ‘woman, wife’, Tgr *bə’əs* ‘husband’ [LsG: 83].

**32. \*bus/c- ‘haze’:** W 3 Gera *bùsá* ‘haze’, Glm *bùuzà* ‘cloud’ [SchB]; E 2 Lele *búsú* ‘brouillard’.

//Sem \**bws* (AA \**bwc*) > Tgr *busay* ‘bruite, brouillard’ [DRS: 52].

**33. C 10 \*bas- ‘sister’:** Ham, Masa *bàs*, Lew *bás* Gizey *bàsù*, Masa *bà/ùsù* [LexC].

//?? Eg *hbsy.t* MR ‘als Bez. der Ehefrau, der Konkubine’ [EG III: 66].

**34. C \*bas- (< \*Hbs/\*bHs) ‘to assemble’:** 3 Bana *bàsà* ‘se réunir, rassembler’, *bàsàvà* ‘reunion, collection’; 6 Daba *bàs* ‘assembler, ramasser’, Buwal *bèč* ‘to assemble’.

**35. \*baç- ‘to harvest’:** C 6 Daba *baç* ‘cueillir (fruits, arachides)’; 7a Skn *bac* ‘to harvest’. Cf. C 8 Mak *baṣi* ‘to pluck (chicken)’ [AIM]. Derived noun: W 3 Dera *básà* ‘harvest season’ [NmK].

**36. \*baz- ‘to spread, scattter’:** W 1 Hs *bázà* ‘to spread thing out to dry’<sup>56</sup>, *bážè* ‘to remove by scattering’; C 3 FK *mbwàzà* ‘to scatter’ //Sem Hbr, Aram *bzbz* ‘diviser, dissiper’ [DRS: 53], Hbr, Aram *bzr* ‘to scatter; répendre, éparpiller’ [KB: 116; DRS: 55].

**37. C \*mbVz- ‘fat’ n.:** 5 Pod *məza* (< *mb-z-*); 6 Daba *mbàzā* ‘la graisse’, Mbudum *mbàza*, ‘graisse’ [MbP], Mafa *mbáza* ‘graisse animale’.

//Cf. Eg *ibz’* AR ‘Art feines Salböl’ [EG I: 64], Cush Aungi *buzzi* ‘fat’ [ApAg:160]. Differently see in TN №44 \**b[c]*, EDE II: 321.

**38. W \*buz- ‘skin’:** 1 Hs *búuzúu* ‘an undressed skin mat or loin cloth’. Denom. verb in \**a-*: \**abuz-* > *ḡ/vVz-* ‘to skin’: W 4 Paa *buzùu* ‘to skin, flay’ [MS], Jmb *vaz-* ‘to skin’ [SkNB].

**39. \*bVz- ‘dirt, faeces’:** W 1 Hs *bízò* ‘rubbish or dung heap or hole’; 6 Ngz *bàžàk* ‘rubbish heap’; C 4 Mwl *bwoži* ‘faeces’ [Kr].

---

<sup>56</sup> Accord. to [TN №34], Hs follows AA \**bz* ‘to open’.

//Cf. Sem Arab magh.dial. *bza* ‘excréments’ (Sem *\*bzy*) [DRS: 54f].

**40. C *\*bVz-* < *Hbz-* ‘to be ill, weak’:** 5 Pod *baza* ‘personne sans force’; 7 Muy *bézāebézāe* ‘illness’.

//Sem Geez ‘*anbaza* ‘be fainthearted, weak minded, faint’ [LsG: 64].

**41. E 5a WDng *bídyé* (< Ch *\*bit’-*) ‘allumer le feu’, *bìdyirè* ‘souffler sur la feu’; C 7a Skn *bat-yak* ‘hot, red or white hot’.**

//Sem Arab *byd* ‘sécher; être intense (de dit de la chaleur)’ [BK I: 183]. For Arab ‘sécher’ cf. W 5 Guus *bàtə* ‘thirst’ [CrG].

**42. E 5a *bády-* < Ch *\*baç’t’-* :** EDng *bádyē*, WDng *báadyē* ‘copuler (hommes et femmes, pas les animaux)’.

//Sem Arab *bwz* ‘injecter le sperme dans l’utérus’ [BK I: 179] > Berb Ahg *bezbez* ‘copulation’ Mzab *bbez* ‘piquer, tromper, plonger dans un liquid; coïter’ [NZ:154]

**43. *\*bVḡ-* ‘white, colored’:** W 3 Krkr *boolàa* ‘white horse’; C 6 Daba *bāḡ* ‘être blanc, briller’; 7 Ould *mbaḡa-mbaḡak<sup>w</sup>* ‘tacheté’.

//Sem Arab *wbš* ‘être marqué de taches blanches (ongles, peau)’ [BK II: 1476].

**44. C [*\*bVḡ-*] ‘shoulder’:** 3 Bana *báḡi* ‘epaule’, FK *bàbàḡà* ‘shoulder’; 7 Mbuko *báḡā* ‘partie supérieure du bras’. See [GrR].

But cf. N<sub>2</sub>214. *\*m-/b-bal-* ‘shoulder’

**45. C *\*bVI-* ‘weak(ness), sickness’:** 7 Mbuko *bele*, Mofu *bālè* ‘faiblesse’, Merey *bèle* ‘faible, faiblesse’, 8 Makari *bululu* ‘sickness sp.’, Kus *bal-kan* ‘(be) weak’ [Al]. Possibly, a loan from Arab *bʿl* ‘être faible, chétif, faible’ [BK I: 80].

**46. ECh 4 Barein *\*bòlló* ; 5b Kaj *bállè* ‘to vomit’, 2 Nch *-bəlu* ‘vomir’ [HmK].** May be cognate with the previous root.

**47. *\*bi/ul-* ‘back (of the body)’:** W 3 Krkr *mbilàa* [GK], Ngm *mbulà* ‘buttocks’; C FK *mbùl* ‘back’; 8 Afd *billum* ‘Rüken’ [Sol:121]. Denom verb: C 8 Kus *bilim* ‘to be last, back, behind’, Makari *bilim* ‘behind, back’ [Al].

**48. *\*m/H-bVI-* ‘to be able’:** W 3 Kupto *mbòléy* ‘to be able to do smth, manage’; E 2 Lele *bàl* ‘égaler, suffir, être capable de’.

//Cf. Sem Geez ‘*abbala* ‘make, do’ [LsG: 34].

**49. *\*m/H-bVI-* ‘to like, love’:** C 6 Mina *mbál* ‘to like’, Daba *mbàl*

‘aimer, vouloir’; E 1 Kera *bèlè* ‘want, love’. Cf E 6 Mok *búlmè* ‘avidité’, 1 Kera *ávàlày* ‘jalousie’; C 5a Hdi *mbuli* ‘égoïste’.

**50.** C 2 Bura *mbàl* ‘beer’; 8 Makari *mbol* ‘millet beer’

//Sem Akk *billu* 1. ‘alloy, melt’; 2. (a t of beer) MA, Nuzi [CAD b: 228], Ug *bl* ‘blended beer’ [DUL: 219].

**51.** C 10 Gizey, Masa *bìnén*, Ham, Musey *bénén*, Lew *ʔàbèné*, Marba *mábinèn* ‘fish Gnatonemus sp.’ [LexC], Azum *bauna* ‘a sp. of edible fish, big and strong’.

//Cf. Sem Arab *bunniy-* ‘carpe’ [BK I: 166].

b. [*\*H-f-n*/*\*H-b-n*] ‘fish’: W 6 Duw *vànyiyà*, Bade, Ngz *vànakau*.

//Eg *ʔbnn* ‘Art Fisch’ Sp [EG I: 8].

**52. \*bVr- ‘to go around’:** W 3 Ngm *bùurô* ‘to go around’ [NEH]; C 2 Bura *bari* ‘detour, to go around’ [BIB].

Deriv.in *-t-*: W 6 WBade *bàrtànu* ‘turn over, roll over’, *bàrbàr-tu* ‘roll around on ground (donkey..)’; 3 Krkr *birku* ‘go around, surround’ [GK].

**53. \*bVr- ‘to leave’:** W 1 Hs *bàri* ‘to leave off’; C 7 Muy *ámbràḥ* ‘leave, stop, let abandon’.

Cf. C 10 Dzpw *virì* (< *ʔabiri*) ‘abandonné’, C 4 Miya *bàram* ‘remainder’ [Sch]

//Cf. Sem Ug *bʕr* ‘abandon, forsake; to leave’, Hbr *bʕr* ‘devastate, sweep away, remove’ [DUL: 209], Aram jp *bāʕeer* ‘éloigner’ [DRS: 75] For cognates of Eg *byʕ* Pyr ‘sich entfernen’ see [EDE II: 126].

**54. \*n-bVr- ‘to chase, drive away’:** W 2 Ngas *várá-ḡ* ‘to chase away’ [JgN]; C 7 Mol *varay* ‘chase away’ [FrM]. Note *v-* < *nv-* < *nb-*

//Sem Arab *nbr* ‘chasser qqn, l’éloigner à force de cris’ [BK II: 1183], ECush Som *buritey* ‘to chase (away)’ [LIS].

**55.** W 3 *\*bur-* ‘to build’: Glm *bár-àalá*, Krf *bur-* ‘to build’ [SchB]; C 7 Mada *mebeber* ‘mur de pierres qui soutient les terrasses’;

//Sem Sab *brʔ* ‘build, construct’ [SD: 30] < Sem *\*brʔ* ‘create (God)’: Hbr *bārā*, Aram *bʕrā*, Arab *baraʔa*, etc. [DRS: 80].

[HSED №342].

**56. \*bar- ‘jackal, wild dog’:** W 3 Ngm *bàbàarà* ‘wild hunting dog’ [NEH]; E 5a Brg *bàrá*, Tor *bara* ‘chacal’.

//Sem Akk *barbaru* from Oakk on ‘wolf’ [CAD: 108, AA 140]

### Chadic \*f-

**57. \*fVd- ‘to die (of fire)’:** C 9 Mnj *fidì* ‘éteindre’; E 1 Ndam *pàdà* ‘cacher, éteindre (feu)’.

//Cf. Sem Arab *fyd* ‘mourir, périr’ [BK II: 652]

**58. W 2 \*fuut < \*fut/d#:** Ngas *fut* ‘stocks for the feet’ [FI], Mghv *nfüt* ‘metal lock, stocks (used in detention centers to keep inmates from escaping)’ [BIM], Goemay *fuut* ‘log of wood to which prisoner was attached’, *lu fuut* ‘prison’ (lu ‘hut’).

//Sem Akk *pādu* ‘to fetter, put in fetters, imprison’ OB, MB, SB [CAD p: 8], ‘einschliessen, gefangen setzen’ [AHw: 808].

**59. W \*fayat- ‘to fight, wrestle’:** 2 Mghv *fyaat* ‘to throw someone to the ground in wrestling’ [BIM]; 4 Wrj *fatai* ‘fighting’ [BIS].

//Sem Tgr *fetäta* ‘to knock down’ (Geez *fyt* ‘to plunder’) [LsG: 173].

**60. W \*fa[h]- ‘to pour’:** W 2. Ngas *foo, fho* ‘to pour away, throw away’ [FI]; 4 Cagu *vo, va*, Mburku *vay* (regress. velarization by assim.), *vow-* ‘to pour’ [SkNB]; Cf. W 5 Grnt *v<sup>w</sup>āa* ‘to pour’ [Hr].

Cf. TN №452 (includes a few Ch forms, following \*pVy/w/?- ‘to pour’, see №394 of the present volume).

**61. C 10 Gizey, Masa, Ham *fék*** ‘chasser avec le chien’ [LexC].

//Sem Arab *fqw* ‘suivre les traces de qqn’ [BK II: 623].

**62. \*fVI- ‘to be, become big’:** W 2 Grk *fwel* ‘to grow; tall’ [Fp]; C 2 MC *fliy* ‘être large’; 6 Buwal *fāl* ‘to enlarge’, Daba *fāfāl* ‘ajouter; accroître’.

**63. \*fVn- ‘flower’:** C ‘flower’ 4 Bch *fīn-to*; 6 Daba *fōfōn* [JgIb], Buwal *fāfān*, Gavar *fafan*; 7 Cuv *méfnéy*; E 6 Mok *póopóonyà* ‘fleur, fraîche’.

**64. \*fun- ‘mush’:** W 2 Goem *fwən* (-a- pl.) ‘mealy, floury substance (usually of cassava)’ [Hlw]; C 10 Musey *funa* ‘la boule, food made of flour’ [ShyM], Dari *fūn*, Dzpw *fūn* ‘boule(tte)’, Azum *afuna* ‘mush’.

**65. \*fir- ‘to cut (a small piece)’:** C 10 Dzpw *fīr* ‘tailler en pointe’. Deriv in *-s-*: W 2 Mghv *fī/uriš* ‘to slice’ [BIM]; 7 Mofu *-fāfārs-* ‘mettre en miettes, couper en petites bouchées’.

//Sem Arab *frfr* ‘couper, briser, déchirer’ [BK II: 582].

**66. W \*fVr- ‘to weed’:** W 1 Hs *fīrè* ‘complete the 1<sup>st</sup> weeding of a

corn crop'; 2 Mpn *fūr* 'to weed', Goem *fār* 'to weed field, clear land' [Hlw]. Cf. C 8 Bud *fārtá* 'déplumer' [Awg].

**67. \*(n-/H-)fVr- 'antelope':** W 2 Ngas *fūr* [Fl], Ngas *nfūr*, *mfūr* 'roan antelope' [JgN]; C 7 Mbuko *fuwar* 'antelope'. Cf. 10 Dari *vārē* 'animal sauvage, viande de gibier', Dzpw *vìrèŋ* 'animal sauvage'. Note W 2 Ngas *fūr* 'musical instrument made of the horn of *fūr* antelope'.

//Sem Arab *ya'fūr*- 'gazelle' en gen. [BK II: 298].

### Chadic \*p-

**68. C 7 Baka *pay* 'ouvrir' [BAS], Mol *pay* 'open' [FsM].**

//SCush rift *\*poo*<sup>2</sup>- 'be open': Irw *puu*<sup>?</sup>, Alg, Bur *poo*<sup>?</sup>; *\*poo*<sup>?</sup>*a* 'opening, hole, space between'.

For a metathesis see CLD V №16 *\*a/wVp*- 'to widen, to open (mouth)'.

**69. \*pVh- 'to rot':** C 8 Afd *pheóh*, Gulfei *fīa*, *fīya* 'rot' [Sol: 205], Makari *pu* 'to spoil (food), (intr.) pourrir' [AlM].

Cf. W 1 Hs *fiyaayà* 'mildew'.

//Berb Shilh *fi* 'suppurer, être crevé (abcès)', Qab *fi* 'suppurer' [NZ: 680].

**70. \*pVyVs- 'upper leg':** W 2 Mnt *pəyas* 'Wade' [JgC], Gmy *paas* 'calf of leg' (apud [TAS: 302]); C 3 Bana *pxàšì* 'hanche'.

**71. Cf. E 5a Mig *pádāw* 'perdre les cheveux'.**

Derived noun: C 5 Pod *ma-fāda* n. 'chauve'; 7 Mafa *fuwda-k* 'calvitie temporale'.

**72. E 1 Ngam *pedī* 'natter, tresser (les cheveux)', Mobu *podē* 'tresser (cheveux)'**

//Sem Arab *hfd* 'filer' [BK I: 456].

**73. \*pVt- 'to refuse, reject':** C 3 Mofu *-pət-* 'to refuse to do smth to smbd'; E 4 Sok *piti*, *phitee* 'verweigern, zurückstossen, refuse, deny, reject' [Luk]. Cf. W 3 Pero *póttó* 'to betray'.

**74. \*pVt- 'to respect':** W 1 Hs *fāataa* 'to wish well to person'; 3 Kupto *fūktéy* 'to greet' (pl. in *-k-*); C 10 Dzpw *pít* 'respector'.

//Sem Arab *fth* 'faire une faveur à qqn, lui accorder qqch' [BK II: 532].

**75. \*pVt- ‘to wrap’:** C 6 Buwal *pat* ‘to wrap up’; E 6 Mok *pùtté* ‘envelopper’.

Derived noun: C 5a Hdi *pəta* ‘mat’; 9 Mnj *potok* ‘natte en bandes cousues’.

**76. \*pVt- ‘cattle’ > ‘bull, cow’:** W 2 Mghv *mpaat* ‘castrated cow’ [BIM]; 10 Gizey *pùtat* ‘vache, cow’ [LexC], Masa *pùt* ‘bovin’, *pùtnà*, *pùttà* ‘taureau, vache’ [CC]

**77. \*pVHVt-/pVt- ‘k of plaited net, cage’:** W 2 Goem *p’it* ‘a type of net used by women in fishing’ [Hlw]; E 5a WDng *póótó*, *pótó* ‘piège à oiseaux construit avec un fil de poils de queue de cheval’, 6 Mok *póotò* ‘piège pour oiseaux (construit à terre)’.

//Berb Wlmd *eftew* ‘tendre (une piège), piéger’ [NZ: 674].

**78. W 2 \*pVk- ‘to rub’:** Ngas *puk* ‘to rub smth’ [JgN], Goem *pàk* ‘to rub smth (oil on body, feet on ground)’ [Hlw].

//SCush rift *\*pikis*, Caus. ‘rub husks from grains’: Irq, Gor *pikiis* [Kies].

**79. \*PVg- ‘to fan’:** W 3 Tng *puge* (sg.) ‘to fan, wave’ (cf. Tng *puke* pl. ‘to winnow (in calabash)’); E 2 Lele *pēg-dē* ‘éventail’.

//Sem Arab *nfg* ‘commencer à souffler (se dit du vent)’ [BK II 1304], Cush Hamir *figya* ‘wind’ [ApAg], dullay Dob *fug-* ‘blasen’ [AMS].

**80. C \*pak- ‘leopard, panthere’:** 1 Boka *pék-tə* leopard’ [Kr]; FK *p(á)kə* ‘leopard’, Higi Moda *puke* [Meek]; 5a Hdi *paka’w* ‘panther’, *paka’w yuvi* ‘hyena’.

**81. C 7 \*pVs- < \*pVs/c- ‘to cut in small pieces’:** Muy *épés* ‘to cut up into small pieces’, Ould *-pāsāy* ‘cut in small pieces; remettre’, *péspès* ‘small pieces’

//Cf. Sem Aram Nab *ps* (< \*pc) ‘part, portion’ [HJ: 921].

**82. C -5a \*pVḷ- ‘to fly’:** Cinn *pàḷ’à*, Gdf *pàḷà* [Kim], Gava *p’ḷa*, Glv *piḷ-ga* [GvH].

For a derived noun cf.: W 2 Ngas *pul pul* [Fl], Mpn *npilpùul*, Mghv *mpùlpùl* ‘butterfly’ [BIM]; C 2 Bura *pḷa* (< *pḷa*, regressive devoicing in contact) ‘flying insect’..

**83. \*pVI- ‘to be ill’:** W 2 Ngas *pal* ‘to feel pain’ [Fl]; C 10 Azum *pupuluka* ‘agony’; E 5a EDng *pàllisē* ‘be very tired’. Cf. C 2 Bura *pili*

‘to infect’ [BIB].

Derived noun: W 6 GBade *pəlaatā* ‘spirit which causes physical affliction’.

//Sem Arab *fyl* ‘être faible, affaiblir’ [BK II: 65], Akk *pilû* SB ‘a disease’ [CAD p: 380].

**84. \*pVI- ‘to brush, shake’:** W 1 Hs *fillà* ‘to get rid of dust (brush)’; C 6 Daba *pèlən* ‘secouer’

//Sem Akk *napālu* from OAkk ‘kick up dust, turn upside down’ [CAD n<sub>1</sub>: 272].

Cf. W 2 Goem *puul*, *pul* ‘dusty, dirty’ [Hlw].

**85. \*pal- ‘hangar, granary’:** C 7 Mol *palpala* ‘straw hut’ [Bow]; 9 Mbara *pólòyó* ‘granary’; E 2 Lele *pàl* ‘hangar’.

//Berb Wlm, Ayr *tafala* ‘hangar; tente, maison provisoire’, Awj *tifili* ‘maison’ [NZ: 563].

**86. \*p[a]n- ‘to raise’:** C 6 Daba *pān* ‘soulever’; E 1 Kera *póné* ‘heben, soulever’. Deriv. 10 Musey *poŋ-ga* ‘lever, soulever’ [ShyM].

**87. W \*pan- ‘to carry, hold’:** 2 Mpn *pán* (pl.) ‘to carry; hold’, Kfy *pan* ‘to carry along’ (apud [TAS: 280]); 3 Bele *fán-kò* ‘to carry, take up’ [SchB]; 5 Zul *pāni* [Cs №782], Mangas *pan* [Cs] ‘to carry’. Cf. 5 Grnt *pani* ‘to take’ [Hr].

Derived noun: 3 Dera *pínén* ‘load’ [NmK].

**88. C \*pun- ‘to rot, smell’:** 3 FK *pùnó* ‘to ferment, decompose’; 9 Mnj *ko-poŋ* ‘cadavre’; 10 Azum *pun-da* ‘to make a smell (body, faeces)’.

//Sem Arab *ʿfn* ‘gâter (la viande)’ [BK II:302], Berb Ghad *taffant* ‘puanteur’ [NZ: 578].

Note W 7 Bok, DB, Sha *fun* ‘Leiche, corpse’ as a loan < Arab *ʿufun* ‘putréfaction’ [BK II: 302].

**89. W 2 \*paŋ ‘viper’:** Goem *páŋ* ‘puff-adder’ [Hlw], Mpn *pāŋ* ‘viper’, Mghv *paŋ* ‘poisonous snake’ [BIM].

//Sem Arab *ʿafnūn-* ‘serpent’ [BK II: 636], cf. Eg *ʿpnn* Med ‘Art Wurm, oder Schlange’ [EG I: 180].

**90. \*pVr- ‘to snatch’:** C 8 Zina *prà* ‘to grab, hold’.

Derived verbs: 6 Buwal *p<sup>2</sup>ràl* ‘to snatch’; 10 Azum *pru-ta* ‘to snatch out (of enemies hand or mouth), to wrest from another’.

Derived noun: W 5a WDng *pèèrè* ‘petite pince en fer’.

**91.** W 2 Goem *par*, Mnt *pai* ‘to send, messenger’ [Fp] .  
//Cush Afar *far*, Saho *fare* ‘to send’, *farto* ‘message’ [Vr], Afar, Saho *faar* ‘senden, schicken’ [RAf], ECush Som *faray* ‘send a message, setting out for a journey’ [LIS], Ong *farat-* ‘to send away’ [SaT].

**92.** W 4 \**par-* ‘antelope horn’: Paa *púrkìti* ‘horn’ (*kiiči*, pl *kiičyaani* ‘Grimm’s duiker’) [MS], Wrj *par-ai*, Miya *apar*, Kariya *par* ‘horn’ [SkNB]. Cf. E 6 Mok *pàrrè* ‘longue trompette’.  
Cf. C 6 \**fara-m* ‘(cow?) horn’ Daba *fàlām*, Buwal *fárám*, Mina *fòrám*, Mbedam *faram*.

## References

- AA 1 - Diakonoff I., Belova A., Militarev A., Porkhomovsky, V. and O. Stolbova. Comparative Historical Afrasian Dictionary. In: *St-Petersburg Journal of African Studies*, 1993 (2), 5-28.
- AA 2 --- 2. In: *St-Petersburg Journal of African Studies*, 1994 (2), 5-26.
- AHw - Soden, W., von, *Akkadisches Handwörterbuch*. Harrassowitz, Wiesbaden, Band 1 (A-L) 1965, Band 2 (M-S), 1972, Band 3 (S-Z) 1981.
- Ais - Aistleitner, J., *Wörterbuch der ugaritischen Sprache*. Berlin, 1963.
- Alio - Alio, Kh., Préliminaires à une étude de la langue Kajakse D'am-Dam, de Toram du Salamat, d'Ubi du Guéra et de Masmaje du Batha-Est (Tchad). In: *AAS*, 230-85.
- AIL - Allison, S., *Logone-Birni Kotoko Provisional Lexicon*. Cameroun, SIL, 1999.
- AIM ---, *Makary Kotoko Provisional Lexicon*, Cameroun, SIL, 2005.
- ALK ---, *Kousseri Kotoko Provisional Lexicon*, Cameroun, SIL.
- AMS - Amborn, H., Minker, G., Sasse H., Das Dullay. In: "*Beiträge für Afrikanistik*", 6, 1980, 228 -282
- Ann - Anonymous. *Bura-English dictionary*, 1953.
- ApAg - Appleyard, D., *A Comparative Dictionary of the Agaw Languages*, Köln, Köppe, 2006.
- ATO – *Sociolinguistic Survey Report of the Languages of the Gawwada, Tsamay and Diraasha Areas with Excursions to Ongota and Arbore*. Cameroun, SIL, 2001.
- Awg - Awagana A., La pluralité verbale en Buduma. In: Ekkehard Wolff (ed.), *TCL I*, 2003, 1-21.
- BaMd - Barreteau, D. and A. Brunet, *Dictionnaire mada*. Berlin, Reimer, 2000.
- BaMaf --- and Y. Le Bléis, *Lexique mafa*. (Collection *Études tchadiques: monographies*). Paris, Güthner, 1990.
- BaMof - Barreteau, D., *Description du mofu-gudur, v. 2. Lexique*. Paris, Orstom, 1988.
- Bargery, G.P., *A Hausa-English Dictionary*. London, Oxford University Press, 1934.
- BAS - Blench, R., Aviwai, Ph. and T. Smith, *Baka : A highly endangered language of Northern Cameroun*. SIL, 2009.
- Bel – Belova A. [Russ] *Etymological Dictionary of Old Arabic/ Этимологический словарь древнеарабской лексики (на материале избранных текстов доисламской поэзии)*. М., ИВ РАН, выпуск 1. 2012.
- BK - Biberstein-Kazimirski, A. de, *Dictionnaire arabe-français*. 2 vol. Paris, Maisonneuve et Co, 1860.
- Bll - Biella, J.C., *Dictionary of old South Arabic. Sabaean Dialect*. (Harvard *Semitic Studies* 25). Chico, Scholars Press, 1982.
- BIB - Blench, R., *A Dictionary of Bura*. Available at: <http://www.rogerblench.info>, 2009.

- BIC ---, *The Chadic Languages. Classification and Reference List*. Available at: [www.uni-bayreuth.de](http://www.uni-bayreuth.de), 2006.
- BID ---, *The Djarim language of Central Nigeria and its affinities* (draft circulated for comment). <http://www.rogerblench.info>, 2005.
- BIFK ---, A Dictionary of Kirya and Konzəl. <http://www.rogerblench.info>, 2007.
- BIH ---, *Word List Elicited in Hya and Psikye*. Available at <http://www.rogerblench.info>, 2002.
- BIM ---, *Mwaghawul-English Dictionary*. Available at: <http://www.rogerblench.info>, 2009.
- BINd --- and A. Ndamsai, *A Dictionary of Fali of Kirya Northeastern Nigeria*. (Draft circulated for comment). Available at <http://www.rogerblench.info>, 2009.
- BIP --- Mwaghavul Pluractional Verbs. *TCL VI*, pp. 51-66.
- BIW ---, *A Wordlist of Sirzakwa (Warji) language*. Available at: <http://www.rogerblench.info>, 2007.
- BIY ---, Ywom Wordlist. Available at <http://www.rogerblench.info>, 2013.
- BljL - Blajek, V., All Chadic Lakes. In: Eva Rothmaler (ed.), *TCL V*, 2009, 65-75.
- Bn - Benton, P. A., *Notes on some Languages of the Western Sudan*. London, 1912.
- BndA - Bender M.L., Aroid (South Omotic Lexicon). In: *Afrikanistische Arbeitspapiere* 38, Cologne, 1994, 133-162.
- BndO ---, *Proto-Omotic Phonology and Lexicon*. Carbondale, SIU Printing /Duplicating, Southern Illinois University, 2003.
- Bow - Bow, C., *A Description of Moloko Phonology*. SIL, Yaoundé 1997.
- BrH - Bramlet, Leo, *Lexique Hədi -Français-Anglais*. Cameroun, SIL, 1996.
- Brs - Bross, M., *Materialen zur Sprache der Ndam von Dik (Republik Tschad)*. PhD, Philipps-University, Marburg, 1988.
- Bry - Brye, E., *A Rapid Appraisal Language Survey of the Baldemu Language*. Cameroun, SIL, 2003.
- BryD --- and E. Brye, *Rapid Appraisal Sociolinguistic Research of Dugwor*. Cameroun, SIL, 2001.
- BryJ ---, *Wordlists for Jimjimen, Gude, Tsuvan and Sharwa*. Cameroun, SIL, 2005.
- BtB - Batic G. C., *A Grammatical Sketch of Bure*, *TCL IX*, 2014.
- CAD - Gelb, I.J. et al., eds. *The Assyrian Dictionary of the Oriental Institute of the University of Chicago*. J.J. Augustin, Glückstadt. 1957 -2010.
- CC - Caitucoli, Cl., *Lexique Masa Tchad et Cameroun*. Paris, Agence de Cooperation Culturelle et Technique, 1983.
- Cer – Cerulli, E. *Studi etiopici*, v. IV, Roma, 1951
- CED - Stolbova, O., *Chadic Etymological Dictionary*, IV RAN, Moscow, 2016/*Этимологический словарь чадских языков*, Ив РАН, М., 2016.
- CLD II --- Chadic Lexical Database, Issue II, M., 2007, CLD III, M., 2009, CLD IV, M., 2011, CLD V, M., 2019.

- Coh - Cohen, M., *Essai Comparatif sur le vocabulaire et la phonétique du chamito-sémitique*. Paris, 1947.
- Cp - Caprile, J.-P., *Liste de mots kabalai et lele* (unpublished), 1972.
- CpT ---, *Lexique tumak-français*. MSAA 5, 1975.
- Cpr - Cooper, K.N., *Lexique Zime-Français. Parler de Dari*. Centre d'Études Linguistiques. Sarh, Tchad, 1984.
- CrG - Caron, B., GUUS, aka Sigidi. Grammatical notes and vocabulary. *AuÛ*, 84, 2001, 1-42.
- CrD --, Dott, aka Zodi. Grammatical notes, vocabulary and text. *AuÛ*, 85, 2002, 161-248.
- CrZ ---, *Zaar* (Dictionary, Grammar, Texts). IFRA, Ibadan.
- Cs - Cospér, R., *South Bauchi Lexicon*. Halifax, the author, 1994.
- Cs№ ---, *Barawa Lexicon. (Lincom Studies in African linguistics)*. Munich, Lincom Europa, 1999.
- CTC - Caprile, J.-P., Notes linguistiques sur le tobanga à partir d'un conte en cette langue. MSAA 12, 1978, 121-175.
- DgB – Dagona, B.W., *Bade-English-Hausa Dictionary (Western Dialect)*, ed. buy R.Schuh. Yobe Research Project, 2009.
- Dj - Djibrine, B.A.Z. and P. de Montgolfier, *Dictionnaire Dangaleat (parler d'Est)*. Centre d'Études Linguistiques, Sarh, Tchad, 1975.
- DMT - Dakouli, P., Maaz, A. and D. Toomey, *Rapid appraisal of the Saba language of the Guera, Chad*. Cameroun, SIL, 1996.
- Dolg – Dolgopolsky, A. (Rus) Сравнительно-историческая фонетика кушитских языков / Comparative-Historical Phonology of Cushitic languages. M., 1973.
- DRS - Cohen, D., *Dictionnaire des racines sémitiques*, fascicules 1-2, Paris, Mouton, 1970; 3-5, Leuven, Peeters, 1993.
- DS - David, N. and J. Sterne, *Sakun-English Lexicon*. Available at: [www.sukur.info](http://www.sukur.info), 1996.
- DUL - Olmo Lete, del, and J. Sanmartin. *A Dictionary of the Ugaritic Language in the Alphabetic Tradition*. 2v. Leiden/Boston, Brill, 2015.
- Ebb - Ebobisse, C., *Les verbaux du dangaléat de l'est (Guéra, Tchad)*, Berlin, Reimer, 1979.
- Eb - Ebert, K., *Sprache und Tradition der Kera. Lexikon*. MSAA 8, 1976.
- Ech – Eguchi, P.K., *Hidé Vocabulair*. Kyoto Univ. African Studies, 6, 1971, 195-283.
- EDE II - Takács, G., *Etymological Dictionary of Egyptian*. Vol. II, Leiden, Brill, 2001.
- EEN - Ehret Ch., Elderkin E. and D. Nurse, Dahalo Lexis and its Sources. *Afrikanistische Arbeitspapiere*. 18, 1989, 5-49.
- EG - Erman, A., Grapow, H., *Wörterbuch der ägyptischen Sprache*. VI Bds. Berlin, Akademie. 1937 - 1971.
- Eh - Ehret, Ch., *The historical reconstruction of Southern Cushitic phonology and vocabulary*. Berlin, Reimer, 1980.

- Fd - Fedry, J., *Dictionnaire Dangaléat*. Paris, Afrique et Langage, 1971.
- F1 - Foulkes, H.D., *Angass Manual*. London, Kegan, Trübner & Co, 1915.
- F1O - Fleming, H.C., et al. Ongota (or Birale). A moribund language of Gemu-Gofa (Ethiopia). *JAL* 3.3, 1992, 181-225.
- Fp - Fitzpatrick, J.F.J., Some Notes on the Kwolla District and its Tribes. *Journal of the Royal African Society* 10, 1910-1911, 16-52, 213-21.
- Fron - Fronzarolli, P., *Studi sul lessico comune semitico, 5. La natura selvatica. Accademia Nazionale dei Lincei. Rendiconti della Classe di Scienze morali, storiche e filologiche*. Ser. VIII, vol. XXII, 1968.
- FrG - Frajzyngier, Z., *A Grammar of Gidar*. Afrikanistik Research in African Studies, 13. Frankfurt-am-Main, Peter Lang, 2007.
- FrP ---, *A Pero-English and English-Pero Vocabulary*. MSAA 38, 1985.
- FrM ---, *A Dictionary of Mupun*. MSAA 11, 1991.
- FrJ --- and Eric Johnston, *A Grammar of Mina*. Berlin-New-York, De Gruyter, 2005.
- FsM --- Friesen, D., *Grammar of Moloko*. Cameroun, SIL, 2001.
- FsO --- Proposed segmental orthography of Moloko. SIL, 2001.
- FW - Fluckiger, Ch. and A. Whaler, A Proposed Wrighting System for the Mandara Language. *SIL*, 2008.
- GAB - Gimba A.M., Ali M.A. and Madu Bah, *Bole-English-Hausa Dictionary*. Ed. by R.G.Schuh. Ajami Press, Box 343, Potiskum, Yobe State Nigeria, 2004.
- GK - Gambo K. and U. M. Karofi, *Karekare-English-Hausa Dictionary*. Ed. by R.G. Schuh. Ajami Press, Box 343, Potiskum, Nigeria, 2004.
- GLBn - Gieder M. and R. Lienhard, *Bana provisional Lexicon*. / [www.sil.org/africa/](http://www.sil.org/africa/) Cameroun, SIL, 2002.
- Gr - Greenberg, J.H., *Languages of Africa*. Bloomington, Indiana University, 1963.
- GrL --- The Labial consonants of Proto-Afro-Asiatic. *Word*, 1958, v. 14, 395-402.
- Grg - Gragg, G.B., *Oromo Dictionary*. East Lansing, Michigan State University, 1982.
- GvPh ---, Gravina, R. *The Phonology of Proto-Central Chadic*. Universiteit Leiden, 2014.
- GvMr ---, with the help of E. Doumok and A. Boydel, *Merey lexicon*. Cameroun, SIL.
- GvNT ---, Nelezek R. and R. Tchalalao, *Mbuko Lexicon*. Cameroun, SIL, 2004.
- Hay - Hayward, R. J., *The Arbore Language*. Hamburg, Buske, 1984.
- Hds - Hudson, G., *Highland East Cushitic Dictionary*. Hamburg, Buske, 1989.
- HfB - Hoffmann, C., *Untersuchungen zur Struktur und sprachlichen Stellung des Bura*. Ph.D. dissertation, Hamburg University, 1955.
- HfC ---, Zur Sprache der Cibak. In: Johannes Lukas, ed., *Afrikanistische Studien*. Berlin, Akademie, 1955, 118-143.
- HfM ---, *A Grammar of the Margi language*. London, 1963.
- Hlw - Hellwig, B., *A Dictionary of Goemay* (unpublished).

- HJ - Hoftijzer J. and K. Jongeling, *Dictionary of the North-West Semitic Inscriptions*. Leiden-New-York-Köln, 1995.
- HmG - Hamm, C., *A Sociolinguistic Survey of the Gvoko and Guduf Languages*. Cameroun, SIL, 2000.
- HmK ---, *Sociolinguistic Survey on the Kabalay*. Cameroun, SIL, 2002.
- Hof - Hofmann, E., *A Preliminary Phonology of Bana*, University of Victoria, 1990.
- Hr - Haruna, A., *A Grammatical Outline of Gurdun\Guruntum*. Köln, Köppe, 2003.
- Hsk - Hoskinson, J. T., *A Grammar and Dictionary of the Gude Language*. Ph.D. dissertation, Ohio State University, 1983.
- HSED - Orel, V. and O. Stolbova, *Hamito-Semitic Etymological Dictionary. Materials for a Reconstruction*. Brill, 1994.
- HuJ - Hutchinson N. and E. Johnson, *A Sociolinguistic Survey of the Ubi Language of Chad*. Cameroun, SIL, 2006.
- Ib - Ibrizimow, D. On the verb in Ngamo. In D. Ibrizimow, ed., *TCL II*, 2006, 35-47.
- IbG - Ibrizimow, D. and A. M. Gimba, eds., *Bole Language and Documentation Unit. BOLDU: Report 1*. Cologne, Köppe, 1994.
- IL - (unpubl.) *Chadic catalogue*, Institute of Linguistics, Frankfurt-on-Main University.
- ISv – Illych-Svitych V.B. (Rus). *Labial plosives in Chadic*. *Yazyki Afriki*, M., Nauka, 1966, 9-34.
- Jag - Jaggar, Ph. J., Guruntum: linguistic notes and wordlist. *African Languages and Culture* 1, 1988, 169-89.
- Jg - Jungrathmayr, H., Unpub. typescript. *Listes de mots kwang, dik, kofa, sumray, ndam, migama, mubi, birgit, zime, masa*. Marburg, 1973.
- JgBid ---, and Alio, Khalil, *Lexique bidiya*. Frankfurt, Klostermann, 1989.
- JgBr ---, Das Birgit, eine osttschadische Sprache. In: *AAS*, 342-61.
- JgC ---, Materialien zur Kenntnis des Chip, Montol, Gerka und Burrum. In: *AuÜ* 48, 1964/65, 181-3.
- JgIb ---and Dymitr Ibrizimow, *Chadic Lexical Roots 2*, Berlin, Reimer, 1994.
- JgJ ---, Beobachtungen zur Sprache der Jegu (and Jonkor) von Abu Telfan. *AuÜ*, 45, 1961, 95-123.
- JgL ---, *La Langue Mubi*. Berlin, Reimer, 2013.
- JgM ---, and Abakar Adams, *Lexique migama*. Berlin, Reimer, 1992.
- JgMb - *La Langue Mubi*. Berlin, Reimer, 2013.
- JgMk---, *Lexique mokilko*. Berlin, Reimer, 1990.
- JgN --- and M. Holubová, *The Ngas Language*. Berlin, Reimer, 2016.
- JgO ---, *One thousand and one Proverbs, Idioms and Sayings in Mushere*. Stuttgart, Steiner, 2008.
- JgR ---, *Die Ron-Sprachen*, Glückstadt, J.J. Augustin, 1970.
- JgS ---, Die Sprache der Sura in Nord-Nigerien. In: *AuÜ* 47:8-89, 1963, 204-220.

- JgSb --- and D. Barreteau, La verbe en sibine. In: H. Jungraithmayr, ed., *The Chad Languages in the Hamitosemitic-Nigrific Border Area*, 1978, 192-229.
- JgT ---, *Dictionary of the Tangale Language*. Berlin, Reimer, 1991.
- JgZ ---, The Zime dialect cluster ('Kado', 'Dari') in southern Chad: Its verbal aspect system. In: *AuÜ*, 61, 1978, 1-27.
- JL - Jarvis E. and N. Lagona, *Podoko Provisional Lexicon*. Cameroun, SIL, 2005.
- JnH - Johnson, E. and C. Hamm, *Mabire: A dying Languages of Chad*. Cameroun, SIL, 2002.
- JnJ - Johnstone, T.M., *Jibbali Lexicon*. London, Oxford University Press, 1981.
- JnM ---, *Mehri Lexicon*. London, University Press, 1987.
- KB - Köhler, L. and W. Baumgartner, *Wörterbuch zum hebräischen alten Testament*. Leiden, Brill, 1958.
- Kg - Kogan, L., Proto-Semitic Lexicon. In: S. Weninger, ed., *The Semitic Languages. An International Handbook*, De Gruyter, 2011, 179 -258.
- Kies - Kiessling, R. and M. Mous, *The Lexical Reconstruction of West-Rift Southern Cushitic*. Köln, Köppe, 2003.
- Kim - Kim Hak-Soo, *On the position of Cinene*. Paper from the 1<sup>st</sup> Biennial International Colloquium on the Chadic Languages, Leipzig, July, 2001.
- KimG ---, *Some aspects of the Guduf verbal system*, mns.
- Kin - Kinnaird, W., *Proposition d'orthographe pour la langue Vamé*. Cameroun, SIL, 2005.
- Kl - Kölle, S. W., *Polyglotta Africana*. London, Church Missionary Society, 1854.
- KOu ---and T. Oumate, *Dictionnaire Ouldeme-français*. Cameroun, SIL, 2002.
- Kr - Kraft, Ch., *Chadic Wordlists*. MSA 23-25, 1981.
- KS - Kawachi, K. A Grammar of Sidaama (Sidamo). Ann Arbor, 2007.
- LexC - Ajello, R., Karya M., Melis A, Dobio O. *Lexique comparative de six langues du Tchadique Central*. Pisa, Edizioni Universita de Pisa, 2001.
- LgK - Leger, R., *Kupto Dictionary* (unpublished).
- LkB - Lukas, J., Die Personalia und das primäre Verb in Bolanci. In: *AuÜ*, Bd. 5, 1971, 14-39.
- LkBd ---, *Die Sprache der Buduma im Zentralen Sudan*. AKM 24/2. Leipzig, F.A. Brockhaus, 1939.
- LkG ---, *Studien zur Sprache der Gisiga*. (Afrikanistische Forschungen 4). Glückstadt, J.J. Augustin, 1970.
- LkH ---, Das Hitkalanci, eine Sprache um Gwoza. In: *AuÜ*, Bd. 48, 1964, 81-113.
- LkK ---, Tschadohamitische Sprachproben aus Nordnigerien. Karekare- und Bolanci-Texte. In: J. Lukas, ed., *Neue Afrikanistische Studien*. Hamburg, Deutsches Institut für Afrika-Forschung, 1966, 173-207.
- LkL ---, *Die Logone-Sprache im zentralen Sudan*. AKM 21/6. Leipzig, Deutsche Morgenländische Gesellschaft, 1936.
- LkM ---, *Deutsche Quellen zur Sprache der Musgu in Kamerun*. (Beihefte zur *Zeitschrift für Eingeborenen Sprachen* 24). Berlin, Reimer, 1941.

- LLS - Luling, U., *Somali-English Dictionary*. Wheaton, Dunwoody, 1987.
- LMb - Lamberti, Melinda, *A Rapid Appraisal Survey of Mbadam*. SIL, 2003.
- LmSh - Lamberti, M., *Die Shinasha-Sprache*, C. Winter, Heidelberg, 1993.
- LmW -- and Sottile, R., *The Wolaytta Language*. Köln, Köpppe, 1997.
- LmY ---, *Materialen zum Yemsa*, C. Winter, Heidelberg, 1993.
- Lnhr - Lienhard R. and M. Giger, *Petit lexique Daba-foulfouldé-français*. Société Internationale de Linguistique B.P. Yaoundé, 1982.
- Lns - Lenssen, T., *Studien zum Verb im Kwang*. AM, Special Issue, 8, 1984.
- Lr - Löhr, D., *Die Sprache der Malgwa*. Schriften zur Afrikanistik Research in African Studies, 6., Frankfurt-am-Main, Lang, 2002.
- LsG - Leslau, W., *Comparative Dictionary of Ge'ez*. Wiesbaden, Harrassowitz, 1987.
- LsS ---, *Lexique Soqotri*, Paris. Klincksiek, 1938.
- Luk - Lukas, J., *Zentralsudanische Studien*. Hamburg, Friederichsen, de Gruyter & Co, 1937.
- LvB - Lovstrand, J., *The Dialects of Barein (East Chadic)*. SIL Electronic Working Papers, 2011.
- Meek - Meek, C.K., *Tribal Studies in Northern Nigeria*. London, Kegan, Trench, Trübner & Co, 1931.
- MN – Ma Newman, R. Y-prosody as a Morphological Process in Ga'anda. *Papers in Chadic Linguistics*, 1977, 121-131.
- Mo - Mouchet, J., Vocabulaires comparatifs de 15 parlers du Nord-Cameroun. *Bulletin de la Société d'Études Camerounaises* 29/30, 1950, 5-74.
- MQK – Mous, M., Qorro, M. and R. Kiessling, *Iraqw-English Dictionary*. Köln, Köppe, 2002.
- MS - Skinner, M., *Aspects of Pa'anchi Grammar*. Ph.D. dissertation. Ann Arbor, 1979.
- MtF - Militarev, A., The Proto-Afrasian Farming Lexicon. In: *Examining the farming language dispersal hypothesis*, Cambridge, 2009, 135-150.
- MtR --- Root extention and root formation in Semitic and Afrasian. In: *Aula Orientalis* 23, 2005, 83-129.
- MuK - Mu'azu, M. A., *A Grammar of the Kilba Language*. Munich, Lincom Europa, 2009.
- NdC - Ndokobai D., *Etude phonologique du Cuvok et principes orthographiques*. Universite de Yaunde, Dep. de Langues Africaines et Linguistique. Cameroun, SIL, 2002-2003.
- NdM ---, *Esquisse orthographique de la langue Mbudum*. Cameroun, SIL, 2011.
- NdP ---, *Esquisse phonologique de la langue Mbudum*, Cameroun, SIL, 2014.
- NEH - Gashinge A., Janga Dole J.A. and U. M. Goge, *Ngamo-English-Hausa Dictionary*. Ed. by R.G.Schuh. Potiskum (Yobe State, Nigeria): Ajami Press (Box 343), 2004.
- Nm - Newman, P., Chadic classification and reconstruction. *Afroasiatic Linguistics* 5 (1), 1977, 1-42.

- NmC ---, *The Chadic Languages Family: Classification and Name Index*. Available at: <http://lah.soas.ac.uk/projects/megachad/misc.html>, 2013.
- NmK ---, *The Kanakuru Language*. University of Leeds in association with the West African Linguistic Society, 1974.
- NmM ---, A brief note on the Maha Language. *Journal of West African Languages* 11 (1), 1965, 57-58.
- NmT ---, A wordlist of Tera. *Journal of West African Languages* 2 (1), 1964, 57-58.
- NZ -Naït-Zerrad, K., *Dictionnaire des racines berbères*, Paris-Louvain, Peters, 1998.
- Or - Ormsby, G., Notes on the Angas Language. *Journal of the African Languages* 12-13, 1913-1914.
- PAZ - Price, C., *Azumeina-English Dictionary*, 1968. Available at: [www.digitisation.unimelb.edu.au](http://www.digitisation.unimelb.edu.au)
- PG - Pillinger, S. and L. Galboran, *A Rendille Dictionary*. Köln, Köppe, 1999.
- RC - Blench, R., *Comparative Ron Wordlist*. Available at: [www.rogerblench.info](http://www.rogerblench.info)
- RA - Reinisch, L., *Die Afar-Sprache*. Wien, Hölder, 1886.
- RB ---, *Wörterbuch der Bilin-Sprache*. Wien, Hölder, 1887.
- RBd ---, *Wörterbuch der Beɗauye-Sprache*. Wien, Hölder, 1895.
- RCh ---, *Wörterbuch der Chamir-Sprache*. Wien, Hölder, 1884.
- RK ---, *Wörterbuch der Kafa-Sprache*. Wien, Hölder, 1888.
- RoM - Roberts, J., *Lexique Mawa*. Cameroun, SIL, 1994.
- Rp - Rapp, E. L. and B. Benzing, *Dictionary of the Glavda Language: I. Glavda-English*. Frankfurt, Bible Society, 1968.
- Sa - Sachine, M., *Le Lamé. (Langues et cultures africaines)*. Paris, SELAF, 1982.
- Sam - Heine, B., The SAM Languages: a History of Rendille, Boni and Somali. *Afroasiatic Linguistics*, 6/2, 1978, 23 - 116.
- SaT - Savà, G. and M. Tosco, *A sketch of Ongotta, a dying language of Southwest Ethiopia*. *Studies in African Linguistics*, 29 (20), 2000.
- Sch - Schuh, R. G., V. C. T. Miya, *Miya-English Dictionary*. UCLA Department of Linguistics, 2002.
- SchB ---, *The Bole-Tangale Languages of the Bauchi Area (Northern Nigeria)*. MSA 13, 1978.
- SchD ---, *Duwai-English - Hausa Dictionary*. Ed. by R.G.Schuh. Published by Ajami Press, Box 343, Potiskum, Yobe State Nigeria, 2004
- SchN ---, *Dictionary of Ngizim*. Berkeley & Los Angeles, University of California Press, 1981.
- SchV --- West Chadic vowel correspondences. In: James Bynon (ed.), *Current Progress in Afro-Asiatic Linguistics*: Amsterdam, Benjamins, 1984, 167-223.
- SD - Beeston, A.F.L., M.A. Ghul, W.W. Müller and J.Ryckmans, *Sabaic Dictionary*, Louvain-la-Neuve, Peeters, 1982.
- SED - Militarev, A. and L. Kogan, *Semitic Etymological Dictionary*. Vol. I. *Anatomy of man and animals*. Münster, Ugarit Verlag, 2000. Vol. II. *Fauna*. Münster, Ugarit Verlag, 2005.

- Shy - Shryock, A., The classification of the Masa group of languages. *Studies in African Linguistics*, 26 (1), 1977, 39-59.
- ShyM ---, Palomo, M. and C. Martin. *Dictionnaire Pratique du Musey*. N'Djamena, Chad, 1998.
- Sk - Skinner, N. A. *Notes on Bata, Bachama (unpublished)*.
- SkH ---, *Hausa Comparative Dictionary*. Köln, Köppe, 1996
- SkNB ---, *North Bauchi Chadic Languages: common roots*. *Afroasiatic Linguistics* 4, 1977, 1-49.
- SmM -Smith, T., *Muyang Provisional Lexicon*. Cameroun, SIL, 2003.
- SmP ---, *Muyang Phonology*, Cameroun, SIL, 1999.
- Smz – Shimizu, K., *The Southern Bauchi group of Chadic Languages*. AM, Special Issue, 2. 1978.
- Sol - Solken, H., *Seetzens Affadéh*. Berlin, Akademie Verlag, 1967.
- Ss - Sasse, H.-J., *The Consonant Phonemes of Proto-East-Cushitic*. *Afroasiatic Linguistics*, 7 (1), 1978.
- SsB ---, *Etymological Dictionary of Burji*. Hamburg, Buske, 1982.
- St - Stolbova O., *Studies in Chadic Comparative Phonology*. Moscow, "Diafragma", 1996.
- StH ---, Vocabulary of 'Fishing' and 'Hunting' in Chadic and Hamito-Semitic. In: A. Mengozzi, ed., *Afro-Asiatic studies*, Milano, Francoangeli, 2005, 29-43.
- Stl ---, *Kirfi-English wordlist*, unpublished, 2000.
- StM --- (Rus). Semantic shifts and lexical reconstruction. Vocabulary of 'sorcery' in Chadic'. *Papers of IV RAN*, 29, Moscow, 2020, 268 -276.
- StV ---, Elements of Chadic Diachronic Morphology. The 'Verbalizer [ʔ]'. In D. Ibrizimow (ed.), *TCL IX*. 2018, 57-63.
- SvM - Suzzi-Valli, Alessandro, and Jules J. Coly, The Maaka language: First insights. In: Henry Tourneaux (ed.), *TCL VII*, 2013, 139-153.
- SvP –*Maaka Oral Traditionals and Proverbs*. Studi Africanistici. Serie Ciado-Sudanese 5. Napoli, 2014.
- Tarb - Tarbutu, M.M., *Bade-English-Dictionary (Gashua dialect)*. Ed. by R.G.Schuh. Yobe Languages Research Project, 2004.
- TAS - Takacs, G., *Comparative Hiistorical Dictionary of the Angas-Sura Languages*. Berlin, Reimer, 2004.
- TN --- *Etyma Afroasiatica Nova. Roots with Initial Labials*. Berlin, Reimer, 2016
- Tourneux, H., Le système consonantique des langues dites "kotoko". In: E. Wolff, ed., *TCL I*, 2003, 115-137.
- TrMba --- Tourneux, H., Seignobos, Ch. and F. Lafarge, *Les Mbara et leur langue*. Paris, SELAF, 1986.
- TrMlw ---, Racine verbale en Mulwi. In: J.-P. Caprile et H. Jungraithmayr eds, *Préalables à la reconstruction du proto-tchadique*. Paris, SELAF, 1978.
- TrMnj ---, and H. Patan, *Lexique pratique du Munjuk des rizières: dialecte de Pouss*. (*Études Tchadiques Monographies*). Paris, 1991.

- TrMs ---, La place du Masa dans la famille tchadique. In: H. G. Mukarovsky, ed., *Proceedings of the 5<sup>th</sup> International Hamito-Semitic Congress, Band I*. Wien, Afro-Pub, 1990, 249-261.
- TrN --- La numération dans les parles “kotoko” du Cameroun. In: A. Mengozzi, ed, *Afro-Asiatic Studies*, Milano, Franco Angeli, 2005, 113-124.
- TrS --- La système consonantique des langues dites kotoko. *TCL* 1, 115-137.
- ThS - Thomas, M.E., *A Grammar of Sakun*. Available at: [http://scholar.colorado.edu/ling\\_gradetds](http://scholar.colorado.edu/ling_gradetds). 2014
- VGv - Viljoen, M., *Precis d'orthographe pour la langue Gavar*. SIL, 2009.
- Voc – Vocabulaire de Base en quatre langues (wandala, fulfulde, francais, anglais). Ann.
- Vn - Venberg, R., Phonemic statement of the Peve language. *AM* 8 (1), Marburg, 1975, 26-43.
- Vr - Vergary, M. and R. Vergari, *A basic Saho-English-Italian Dictionary*. Published in Asmara, Eritrea, 2003.
- Wff - Wolff, E., *The Lamang Language and Dictionary, v.2, A Dictionary of Lamang*, Köln, Rüdiger Köppe, 2015.
- WfN --- and Ch. Naumann, Frühe Lexikalische Quellen zum Wandala (Mandara) und das Rätsel des Stammauslauts. In: *AAS*, 373-413.
- WP - Welbeque, Ch. and P. Palayer, *Lexique Léle-Français*. Sahr-Tchad, Centre d'Études linguistiques, 1982.
- YB - Yves, L., *Baka Orthography*, Cameroun, SIL, 2009.
- ZK - Odden, D., Schmidt B.K., and A. Holmberg, *Aspects of Zina Kotoko Grammar*, Lincom Europa, 2002.
- ZIL - Haller B., Lawarum A., Douatai D., Pourtshom H., Baitoua J-P, Magdeme G. and J. Amadou, *Zulgo Lexicon*. Cameroun, SIL, 1986.

### **Bibliographic abbreviations**

- AAS - *Egyptian and Semito-Hamitic (Afro-Asiatic) Studies in Memoriam W. Vycichl*, G. Takacs ed., Brill, Leiden, 2004.
- AKM - *Abhandlungen für die Kunde des Morgenlandes*.
- AM - *Africana Marburgensia*.
- AuÜ- *Afrika und Übersee*.
- JAL – *Journal of the African Languages*
- MSAA - *Marburger Studien zur Afrika- und Asienkunde. Serie A*. Berlin, Reimer.
- SCH - *Selected Comparative-Historical Afrasian Linguistic Studies Im memory of Igor. M. Diakonoff*. M.L. Bender, G. Takacs, D. Appleyard eds., München, Lincom Europa, 2003.
- SELAF - *Societe d'Etudes Linguistiques et Anhtropologiques de France*.
- SIL - *Summer Institute of Linguistics*
- SOA - *Sprache und Oralität in Afrika*.
- TCL - *Topics in Chadic Linguistics*.

### References by default

Azumenia - PAZ	EDangla – Dj	Ma(a)ka - SvM	Muyang - SmM
GBade - Tarb	FK - BlFK	Makari - AlM	Ngizim - SchN
WBade - DgB	Gavar - VGv	Malgwa - Lr	Ouldem - KOu
Bana - GIBn	Gisiga - LkG	Masmaje - Alio	Pero - FrP
Bidiya - JgB	Glavda - Rp	Mawa - RoM	Podoko - JL
Bure - BtB	Gude - Hsk	Mbara - TrMba	Saba - DMT
Buwal - VBw	Hausa - Bargery	Mbuko - GvNT	Sakun - DS
Chuvok - NdC	Hdi - BrH	Merey - GvMr	Tangale - JgT
Dari - Cpr	Hitk - LkH	Migama - JgM	Toram - Alio
Dugwor - BryD	Kajakse - Alio	Mobu - Lns	Tumak - CpT
Duwai - SchD	Kera - Eb	Mofu - BaMof	Vame - Kin
Dzəpaw- Sa	Lele - WP	Mokilko - JgMk	WDangla - Fd
Dyarim - BID	Mada - BaMd	Mulwi - TrMlw	Zulgo - ZIL
	Mafa - BaMaf	Munjuk – TrMnj	

## Contents

Введение / Introduction in Russian	5
Структура этимологической статьи	13
Foreword	
Introduction	15
The structure of individual articles in the main set	22
The list of Chadic Languages	24
Abbreviations	27
Conventional signs	28
Chadic Lexical Database	29
*b-	29
*f-	129
*p-	162
Fragmentary isoglosses / Фрагментарные изоглоссы	218
References	230
References by default	239
Bibliographic abbreviations	240