The Biconsonantal Semitic Lexicon
1. The Series /'-X-/*

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[The paper represents the first instalment of a series of about thirty planned studies on the whole corpus of biconsonantal Semitic 'roots'. The aim of these studies is, on the one hand, to identify such clusters as actual lexical units in the Semitic lexicon and, on other, to determine their productivity in terms of lexical expansions. To achieve this, all the biconsonantal 'roots' will have been empirically scrutinised by searching for all their possible combinations with the ten 'morphemic' determinatives (/', h, l, m, n, r, š, t, w, y/) in all three possible positions: prefixed, infixed, and suffixed. This search has been carried out on the basis of the generally accepted dictionaries of the Semitic languages, ancient and modern, taking into account phonological and semantic feasibility as well].

0. Introduction

a) Premises

From the phonetic point of view, a Semitic lexical unit can be defined as a 'polyphone(me)' or cluster of phone(me)s. The minimal unit is formed by consonant+sonant/vowel, corresponding to an open syllable, and the total number of such units is equal to the monoconsonantal series of lexical units. We have already dealt with this series and its capacity to form lexical units in Semitic[1]. In fact, the number of Semitic monoconsonantal designative lexemes is extremely low, possibly almost null, as predicted by Diakonoff[2]. It is restricted almost to the functorial series, and in any case it is far below the possible total. This series probably goes back to a pre-Semitic level which cannot be traced with any degree of certainty. In this regard, however, the functorial monoconsonantal series is very productive in Semitics, on both the

1. Cf. G. del Olmo Lete, "The Monoconsonantal Lexical Series in Semitic", *AuOr* 16, 1998, 37-75.
2. Cf. I.M. Diakonoff, "Problems of Root Structure in Proto-Semitic", *ArOr* 38, 1970, 460ff. ('To sum up, a monosyllabic primary root morpheme can include: (1) two phonemes, the first being either a non-sonorant or a sonant, the second necessarily a sonant').

morphological and lexical levels, mostly in the 'deictic' series, such as the pronominal series[3], many of its items being deictic clusters in nature. These functorial elements are also sometimes found as lexical constituents in lexicalised syntagms[4] and above all as 'determinative' expansions of biconsonantal bases.

In principle, these biconsonantal bases represent phonetic clusters of two consonants and two sonants/vowels, with four phonetic positions in all, with the inflected morphophonemes in final position. With this series we now enter an almost generally accepted dimension of the Semitic lexicon[5]. If we are able to delimit it, then we will have a very important etymological access to the third and more significant root corpus of the Semitic lexicon, the triconsonantal set, many of its items apparently being expansions of the previously defined biconsonantal bases. The organisation of the general Semitic lexicon can then proceed in a more logical and systematic way: from the minimal to the more complex phonetic/phonemic constituents[6]. It will help, then, to determine the semantic function of the expansive morphemes and of the resulting expanded patterns. In any case, we have to keep in mind the indissoluble relationship between phonology and semantics and also to remain within the limits of a well-controlled level of a structured language within the framework of a well-defined phonetic table. In this way we will avoid remote comparisons (with languages in other families), which would ultimately take us right back to glottogony (i.e. the very origin of language) or expressive phonetics[7]. If sometimes we adduce comparisons from Afro-Asiatic or even from 'Nostratic', that will be only in order to corroborate an etymology at an illustrative level and not to provide its foundation. In this respect, the Semitic subfamily is a late linguistic system which appears fully organised in its phonological and morphosyntactic constituents.

The usual reference to the 'intensified' realisation of the biconsonantal bases implies that often the 'simple' base is not actually documented. In such cases, the biconsonantal base is also an 'abstract' as a 'root'. We are dealing then with hypothetical lexical units, which in this sense take us somewhat beyond the Semitic horizon to a deeper and more remote level of comparison. This means that pure Semitic etymology will often be a 'penultimate' inquiry, but nevertheless valid in itself and critically indispensable, in order to guarantee the realisation of such a broader etymological enterprise. And more importantly, it remains under control, phonologically and semantically.

Another problem that has to be faced is the determination of the functional nature of the etymological items. Are they 'originally' nouns or verbs, are they designative or predicative? Leaving aside the question of which is first[8] and also the clear-cut and restricted category of the 'primary nouns', a category assumed

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3. Cf. G. del Olmo Lete, "The Semitic personal pronouns. A Preliminary Etymological Approach", in Y. Avishur, R. Deutsch, eds., *MICHAEL. Historical, Epigraphical and Biblical Studies in Honor of Prof. Michael Heltzer*, Tel Aviv 1999 (This study now needs to be brought up to date).

4. Ar. *ğā'a bi > ğāba* is a typical example; cf. A. Zaborski, "Biconsonantal Roots and Triconsonantal Root Variation in Semitic: Solutions and prospects", in A.S. Kaye, ed., *Semitic Studies in Honor of Wolf Leslau ...*, Wiesbaden 1991, vol. II, p. 1681; L. Edzard, *Polygenesis, Convergence and Entropy: An Alternative Model of Linguistic Evolution Applied to Semitic Lingusitics*, Wiesbaden 1998, p. 174.

5. Cf. G. del Olmo Lete, *Questions de linguistique sémitique. Racine et lexème. Histoire de la recherche (1940-2000)* (Antiquités sémitiques V), Paris 2003, pp. 91-137; and the articles by Zaborski and Edzard quoted in the prevoius n.

6. Cf. G. del Olmo Lete, "An etymological and comparative Semitic dictionary. Phonology versus semantics: questions of method", in *Proceedings of the International Colloquium on Comparative Semitics. Barcelona, 19-20 November 2004*, in the press.

7. This seems to be the claimed depth of etymology in keeping with its illimited comparison (nostratic) range, according to U. Rapallo, "La parte alta del corpo nella preistoria delle lingue", in P. Marrassini, ed., *Semitic and Assyriological Studies Presented to Pelio Fronzaroli by Pupils and Colleagues*, Wiesbaden 2003, pp. 560-584, especially pp. 579ff.

8. On this cf. G. del Olmo Lete, *Questions de linguistique sémitique*, pp. 49ff.

here without further criticism[9], we take for granted that the functions of nouns and verbs are simultaneous from the viewpoint of historical linguistics. Both functions represent the morphosyntactic articulation of the original inflected character assumed historically by this linguistic branch; a further horizon lies beyond our present inquiry. The fourth position of the biconsonantal unit is precisely this articulation, which consequently will be left undetermined[10]. Historically, each language will develop its own aleatory system of lexical realisation, starting from the ample set of possibilities presented by the structure of the general or common Semitic system. This affects not only the morphological use of the base, but also its mere presence in the lexicon of each language. In the present study, all the biconsonantal bases attested in any Semitic language are collected, with the presupposition that all of them are or may be original Semitic lexemes[11].

All these phonological requirements of the original bases shape the iconic features of their referential contents, i.e. the original semantics of any of them. In this respect, if we speak of 'basic seme', we do so from a more or less exact 'componential analysis' or search for 'semantic indicators'. Against a widespread view, our intention is not to reproduce the 'original meaning', often unattainable and of necessity always 'concrete', but to uncover the functional load of such a meaning. This function underlies its concrete meaning and explains the shifts or 'radical metaphors' present in the various semantic systems and born from the different environmental situations of the speakers. In this sense, the 'basic seme' (BS) is the semantic correlate of the 'root': an abstraction or metalinguistic element, not an item of the 'original' lexicon as such[12]. Taking this into account, the semantic field (SF) is also indicated only for the original base; the derived bases are believed to be self-evident in the semantic development or to be explained from the point of view of the historical lexicon of each language and dialect.

Semantics, above all the analytical semantics of a dead language with no living speakers[13], will always be 'subjective', that is to say, it will always start from the fixed socio-cultural system of our own apprehension of reality, distant and different in many aspects from that of the language under study. To bridge the gap, we must follow a path that is not always clearly marked. The semantic shift that presides over this evolution and becomes the normal and 'economic' way of language development has no fixed rules and depends heavily on the psychological situation and perception of the group which generates it. This perception is to a large extent situation-dependent and unpredictable. The fragmentation, analysis or decomposition of the meaning is the only 'objective' tool we have to trace this development. In this way both the origin of this meaning (causality) and its fragmentation (aspect) can be ascertained. They are the two basic forms of *metonymy*. Also, the transposition of meaning, in the global structure of the presumed parallel semantic field or in its functionality (levels of comparison), can have taken place. This is the function of *metaphor* in its multiple forms. With it we enter the even more 'subjective' and almost free mechanism of semantic shift, for which there are no fixed rules either and which adds to the basic 'subjective' nature of the language as the coordinated perception of reality. Metaphor, which in the long run becomes 'lexicalised metaphor', is the foremost mechanism of the development and 'enrichment' of

9. PrimW are considered those semantical universals which are non-productive as predicative 'bases', aside from denominative use.

10. There are of course other morphemic positions (prefixed and infixed, internal and external) to carry out the whole inflected articulation and we do not wish to discuss priorities in this connexion.

11. In this regard, the many onomatopoeic bases, above all SS, may be considered late lexical innovations.

12. Cf. in this connexion G. del Olmo Lete, *Questions de linguistique sémitique*, p.189ff., and pp. 142ff. on Barr's opinion; cf. in this regard also J.F.A. Sawyer, "Root-meanings in Hebrew", *JSS* 12, 1967, 37-50.

13. Cf. G. del Olmo Lete, "Problemas de la traducción de lenguas sin hablantes (Desde la perspectiva del Semítico Occidental)", *AnFil* 26, E, 2004, pp. 9-23.

language. Its 'economic' character, then, dispenses with the creation of new lexemes, matching its creative nature, which makes of the linguistic evolution of any language not only a functional and practical process, but also one that is creative and poetic. Denomination or reference turns into connotation and intelligibility. Through the interplay of multiple level references or comparisons, 'meanings' acquire 'sense'.

b) Treatment

As for the actual organisation of this paper, the basic *default lexical sources* used in it are listed below[14]. Unless otherwise indicated, the lexical data *literally* come from them. In this way we can avoid quoting the source in each case. I have generally preferred medium-sized lexica written in English, on the one hand to avoid a further link in translation and on the other to put forward the primary and commonly accepted meanings, leaving aside the many semantic variations to be found in the larger source and context dictionaries. These are quoted occasionally, in order to point out semantic nuances that may be useful to trace the shifts that the basic seme experienced in some languages, above all in the case of remote comparisons. These and other bibliographical items are all given in a second list. This list has been kept to a minimum by referring to the principal dictionaries (AED, CDG, DRS, HALOT, etc.) of some individual languages which provide information on the traditional discussion on each lexeme. We have kept to the empirical data, reducing to a minimum the discussion of other opinions and leaving the reader to appreciate how much of what has been adopted here is appropriate.

First, each of the biconsonantal clusters of the series /'-X-/ has been submitted to an analysis of its simple phenotype (where attested) or its intensified phenotype in any of its second (-v-) or third (C_2) positions and also in any of its possible (re)duplicated or geminated phenotypes (/'-X'-X-/). We assume that these phenotypes are the actual witnesses of an originally simple biconsonantal root/base, that normally shows a strong tendency to internal expansion, here defined as 'intensification', a well-known trend operative at the morphological level in all the Semitic subgroups, specially in South Semitic (the Ethiopic languages).

Second, as in the sample already provided[15], the biconsonantal clusters identified in this way will be tested against a table of 10 expansive morphemes, recognised as such at the morphological level[16]. They are as follows:

14. We have excluded Modern Hebrew, because from the etymological point of view its lexical material is found in Biblical and Middle Hebrew and in Aramaic and Arabic. The new lexical creations and adaptations are clear in their origin and belong to a historical dictionary. On this aspect cf. E. Klein, *A Comprehensive Dictionary of the Hebrew Language for Readers of English*, Jersualem/Haifa 1987. Also Arabic dialects have been put aside for the time being.

15. Cf. G. del Olmo Lete, "Notes on Semitic Lexicography (III). The Proto-Semitic Base (/dal-/) and its expansions", *AuOr* 21, 2003, 205-212.

16. On the special cases of /n/ and /r/ in this connexion cf. W. von Soden, "*n* als Wurzelaugment im Semitischen", in *Bibel und Alter Orient*, Berlin, 1985, p. 109-12 (reprint of 1968); W. Eilers, "Zu Resch als Wurzeldeterminative (r-)", *OS* 37-37, 1987-1988, 39-45; B. Kienast, "Weiteres zum r-Stamm in dem Akkadischen', *JCS* 15, 1961, 59-61; also, although not directly connected with the present treatment, cf. M. Fraenkel, "Bemerkungen zum hebräischen Wortschatz", HUCA 31, 1960, 72-101 ("Das 'Reš' als Dehnzeichen in den Quaternärstämmen"). More generally, the contributions by S. T. Hurwitz, *Root-Determinatives in Semitic Speech. A Contribution to Semitic Philology*, New York, 1913 [reprint 1966]; S. Moscati, "Il biconsonantismo nelle lingue semitiche", *Biblica* 28, 1947, 113-135. On the other hand, the general approaches of Fraenkel and Ehret to the origin of IIIy weak verbs and to Hamito-Semitic reconstruction respectively seem to be too speculative; therefore I prefer not to include them.

/XaZ-/	/'/	/h/	/l/	/m/	/n/	/r/	/š/	/t/	/w/	/y
Prefix	/'XZ/	/hXZ/	/lXZ/	/mXZ/	/nXZ/	/rXZ/	/šXZ/	/tXZ/	/wXZ/	/yXZ/
Infix	/X'Z/	/XhZ/	/XlZ/	/XmZ/	/XnZ/	/XrZ/	/XšZ/	/XtZ/	/XwZ/	/XyZ/
Suffix	/XZ'/	/XZh/	/XZl/	/XZm/	/XZn/	/XZr/	/XZš/	/XZt/	/XZw/	/XZy/

Besides these possible expansions of the biconsonantal lexemes in the three possible positions (prefixed, infixed, suffixed)[17], which is the main subject of this article, the triconsonantal Semitic lexicon, also exhibits the well-known series of bases sharing two consonants, with a semantic relationship of varying strength. Once the biconsonantal series has been isolated, we will be able to ascertain whether this shared cluster has any correspondence in the biconsonantal series or whether the triconsonantal roots/bases sharing it have to be taken as aleatoric 'allotheses', generated either by phonetic variations within the same articulatory group or by alternative dialectal resonances, due to the functions of stress or to other analogical causes. In any case, we leave out of consideration this third class of 'expansions' of a hypothetical shared biconsonantal cluster. This is not, properly speaking, a radical expansion, but must be labelled the alternation or allothesis of a base that was triconsonantal in origin[18]. The analysis of this lexical class already corresponds to the compilation of a global comparative and etymological lexicon of the Semitic languages. We intend only to provide some contrasted material prior to this compilation, namely, the series of biconsonantal bases and their certain or probable expansions. Only one 'original' biconsonantal lexeme/seme with two possible contrastive vocalic realisations (/a::ə/) is assumed, leaving aside ancient or late onomatopoeias, often limited to one language or linguistic family.

This is the first instalment of a series of about thirty studies, the aim of which is to revise the whole Semitic lexicon and of which a first more detailed draft has been already set out[19]. The treatment here will be more sober and 'algebraic', and does not take account of the implicit explanations to emerge from the draft. This form of publication will make it possible for any useful criticism received to be included in the final redaction. Also the complete tabulation of the results, as far as the bearing of each expansion morpheme is concerned, will be left to the final article in the series. In the meantime, only a summary sketch is provided.

The Series /'-X-/

/'vB-/

1a - First level: a) simple base

/'aB-/ 1) **PrimW** with frequent conson. intens. < /'ab-/ 1) > /'ab(b)-/, CS. **BS**: 'generative and social male principle (life and power)' > father, progenitor, head of the stirps, chief: **Akk.:** *abu(m)*, pl *abbū*, 'father', *abbūtu(m)*, 'fatherhood'; **Ebl.:** *a-bu*, 'father, one who is responsible' (TIE I 3, 6-7); **Amor.:** *'ab*, *'aba*, 'father' (AOAT 271/1:406; ARES 3:200f.; APNMT:154); *'abum,* 'father' (CAAA:13);

17. Cf. W. Eilers, "Die zweiradikalige Basis der semitischen Wurzel", in H. Jungraithmayr, W.W. Müller, eds., *Proceedings of the Fourth International Hamito-Semitic Congress, Marburg, 20-22 September, 1983* (ASThHLSc; Series IV: Current Issues in Linguistic Theory, 44), Amsterdam / Philadelphia 1987, pp. 509-524.

18. On the problems involved here cf. G. del Olno Lete, *Questions de linguistique sémitique*, pp. 126ff. In my opnion, to consider all the triconconsonantal bases as third radical expansions is out of place; cf. C. Ehret, "The origin of third consonants in Semitic roots: an internal reconstruction (applied to Arabic)", *JAL* 2/2, 1989, 107-202.

19. Cf. G. del Olmo Lete, "Notes on Semitic Lexicography (II). The Proto-Semitic Base (/dal-/)", *AuOr* 20, 2002, 99-113.

Ug.: *'(a)b (> '(i)b)*, 'father, ancestor'; **NWS:** Phoen.-Pun., EpHeb., Moab., EpAram. *'b*, 'father, ancestor(s)'; Hat.: *'by*, 'lord, patrician' [< Phoen. *'bt*, 'a father's (legal) power, status of a father'(?)]; **Heb.:** *'āb* (pl. *'ābôt*), 'father, progenitor'; **Aram.:** JPAram. *'b(')*, 'father, ancestors'; JBAram. *'āb'ā*, 'father, common factor'; *'īb'ā*, 'father' (DTT:44); JA *'b*, 'father', pl. 'ancestors'; Syr. *'abā'* (pl. *'abbᵉhātā'*), 'father'; Mand.: *ab, aba* (pl. *abahata)*, 'father'; NAram.: *'abā'/ǎ-wâ*; *'ābo*, 'father' (TVSyCh); **ESA:** Sab. *'b* (pl. *'abh, 'abw)*, 'father, ancestor', *'abwt*, 'ancestry, agnates'; **ENA:** Saf., Lih., *'b*; Tham. *'abwt*, 'fatherhood' (DRS:1); **MSA:** Meh. *(ḥ)āyb, (ḥ)awb, 'īb*, 'father', *(ḥ)ābū*, 'people'; Jibb./Soq. /'b/: *'iy/'ētə/'iif*; 'father, *'eb/'ētə/ə'əb*, 'big', /'bw/: *yə, εyə/ə'əfo*, 'people'; **Ar.:** *'abū*, 'father', *abbū*, dialect. variat. of *'abū*, 'a father'; **Eth.:** Ge. *ab* (pl. *'abaw)*; Tig. *'ab*, 'father' [cf. suffix. expansion *əbəne*, 'der Starke, der Hervorgehende'(?); and by semantic (< /'ab(b)ôt/) or phonological contamination (< /'m(m)/) *abot*, 'Großmutter']; Tigñ.: *ab(u)*, 'father, ancestor, progenitor; Amh.: *ab*, 'elder, forefather, Eternal Father' [>? *abet*, 'yes, Sir!, here I am!']; Gur. *ab*, 'father, owner'.

Apparently onomatopoeic (infantile) in origin (with the allophonic alternations /b:p/), with many semantic developments and attributions, social and religious, in most languages, Semitic and non-Semitic. One of the 'six' nouns with a long suffix vowel (except in Meh.), probably due to secondary (compensatory [/'ab- > /'ab(b)-/ *versus* /'ab-/ > /'ābû/]) and analogical expansion ([< *'ābiyu* < /'abû/, 'who decides' (?)]), since it affects the inflexional position (for a discussion cf. MacDonald 1963-1965:63-85; Schub 1978:223-225; Voigt 1988:64ff.; Voigt 2002:37-44; DRS 1; marker of pl. and coll. [?]).

A particular semantic shift by intens., not attested as an independent predic. base (< 'to act as a father, generator'), may occur in Akk. *abunnatu(m)*, 'umbilical cord' (AHw 9) (?); also Eth.: Tig.: *atəbä*, 'to cut the umbilical cord', Amh.: *attäbä* I, 'to cut the umbilical cord of a newborn baby', 'to brand government cattle with a brand which shows they are government property', 'to mark one who is baptized into the faith as a member of the Christian community', 'to indicate or mark s.th. as one's private property'; variant *attamä*. - **AA:** **'ab-*, 'father', attested in all the families (*Essai* 77; HSED 1; Murtonen 1989:79). – **Nostratic:** **'ab-* 'father, forefather' (NM 572f.). - **SF:** Family relationship.

1a - First level: b) intensified base

/**'aB-**/ 1) Denom. deriv. by vocal. intens. < /'ab-/ 1) > /'āb-/, as quantitative opposition of length (?), NWS. **BS**: 1) cultural development from 'father' to 'ancestor': **Ug.** *'ab*, 'ghost, spirit' (// /'ab-/; cf. *aby*, 'ancestral' (?); but cf. Dietrich/Loretz UF 34 2002 937f.: 'gar nicht existiert'); **Heb.** *'ôb* (</'āb-/), 'spirit of the dead' (cf. the idiom 'to be gathered to his fathers'); **Aram.:** JPA *'ôb, 'ûbā'*, 'necromancy/necromancer' (DTT:21); JBA *'ôbā'*, 'underworld spirit', 'necromancer (*'wb' ṭmy'* < Akk. *eṭemmu*, DJBA 84/506) . - 2) KW by semantic shift from < /'ab-/ 1)[?], monthn., ES/NWS: the 5th Babylonian month, the 11th Jewish month: **Akk.** *abu(m)*; **Emar.** *abî* (Fleming 2000:174ff.); **MHeb.** LW *'āb* (DTT 1); **Aram.:** JB/PA *'ab*, 'Av, the eleventh month'; JA *'b*, 'Av, the fifth month'; Syr. *'ab*, 'month of August'; Mand. *ab*, 'month under the rule of Leo'; **Eth.:** Ge. *'ab,* 'the fifth Jewish month'.

Uncertain etymol.; alternatively < LW/KW < Akk. *ab/pum* , 'hole, opening (in the ground)' >< Hitt. *api-*, 'Loch, im Boden, Opfergrube' (HEG 47), possibly a phonetically conditioned second millennium LW. Less likely < Ar. /'wb/, 'to come back' (AEL 123-124; cf. HALOT 19, DRS 11; Murtonen 1989:84). Cf. DRS 1; HRCohen 1978:73f; MECohen 1993:319ff., 343f. (in relation to late Akk. and Hitt. *ab/pu*); Ebach/Rüterswörden 1980/1977; Loretz 2002:481ff. (Ug. *'ap*); Tropper 1989:189ff. The evidence from Emar.

abû is ambiguous (cf. Fleming 2000:186ff.). Also the relationship to **AA** *'ab-/+'ub-, 'to fall, descend', on the basis of some Chad. and Cush. dialects, is not very compelling (HSED 2).

/'aB-/ Denom. deriv. by conson. gemin. < /'ab-/ 1) > /'abb-/, CS. **BS.:** 'primordial, generating water': **Akk.** *abūbu(m)*, 'flood, deluge' (cf. *abbu*, 'swamp'?); **Aram.:** Mand. *tababia*, 'storms, hurricanes'; **Ar.** *'a/ubābu*, 'vague, flot, grande masse d'eau' (DAF 2); **Eth.:** Ge. *'ababi*, 'wave'.

Cf. Ge.-Amh. *'abāwi/'abäy/abbay*, '(father) blue Nile' < /'abaw:ya/, as complementary expansions (cf. DRS 1); but cf. AED 1203, possibly < /ʕby/, 'the big one'. The conson. intens. is also found in /'ab-/, especially in pl. forms. It is more difficult to determine the relationship of this cluster to Pers. *'āb*, 'water' (CPED 1ff.).

2a - Second level: expanded base

Of the possible prefix. series, WS /š'b/:. Ug., Heb., Aram., ESA 'to draw water' and Ar. *sa'aba*, 'to squeeze', 'to widen a skin for water', *sa'iba*, 'to be satisfied by drinking', show only a remote semantic relantionship to /'ab-/ through /'ab-/. Ar. *šu'būbu*, 'shower, rain' (AEL 1489) could represent such an expansion; cf. Ar. *'a/ubābu* (*supra*), but as a prefix. /š/ expansion they would be phonetically anomalous in Ar. and on the other hand, this lexeme is not attested in NWS, indicating a LW. Instead the meaning 'impetus, sharpness, vehemence, force' seems to be a secondary metaphor. shift. In any case, it would be a very old expansion or rather an original triliteral base of **AA** origin: cf. Eg. *šwbty*, 'a jar', and maybe Eg. *s3b*, 'cross water'.

The suffixed series presents some clear radical expansions (/-w:h/). The alternative form of suffixation clearly shows the expansive character of the base.

/'aBaWa/ Denom. predic. expan. suffix. < /'ab-/ 1) > /'ab(a)+wa/, WS/SS. **BS:** 'to become a father': **Ar.** *'abā(w)*, 'to become a father', > *ista'abba*, 'to adopt as a father', possibly in contrastive distribution with /'abaw:ya/; >(?) *'ubbiyyatu*, *'ibā'u*, 'self-magnification, greatness, majesty'; **Eth.:** Amh.: >? *abäy* or *abəy*, 'one who feeds', *abbayye*, 'daddy!'.

A semantic derivation is possibly to be seen in JPAram. *'bw*, 'stick with a metal point' (DJPA 32); and in Sab. *t'by*, 'permanent residence' // 'ancestral boasting'.

/'aBaHa/ Denom. predic. expan. suffix.(?) < /'ab-/ 1) > /'aba+ha/, SS. **BS:** 'to act as a superior authority'/'to make s.o. father' > appoint a subordinate, give authority, entrust': **SAE:** Sab. *'bh*, 'appoint s.o. as an official'.

Other secondary nominal suffix. derivations may be seen in Tigñ. *ab-ša*, 'term of respect used in addressing or referring to a woman older than the speaker', and in Mand. *abual*, 'offspring, young creature'. Also a suffix. /-r/ expansion may be seen in CS /'br/, with the semantic connotation of 'strength', mainly sexual: Akk. *abru(m)*, 'strong, robust', 'wing, fin'; Ug. *ibr*, male animal, 'bull, horse'; Heb. *'abbîr*, 'strong', *'ēber*, 'wing'; MHeb. *'ēber*, 'limb, membrum virile' (DTT 9); JAram. *'ēber*, 'limb'; *'êbārā'*, 'limb, membrum virile' (DTT 44); Syr. *'ebrā*, 'limb, member'; Ar. *'ibratum*, '(extremity) member' > 'needle' (< 'that stings'); and possibly by enant. (?) Tigñ. *abbärä*, 'to be/become old'. This expan. may be also documented by **AA:** Eg. *íbr*, 'stallion', *'a-bí-ra*, a Sem. LW (Benz 1971 507); Chad. *abər*, 'young animal in its prime' (cf. Murtonen 1989:81).

1b - First level: simple and intensified base

*/**'aB-**/ The simple original base is not attested, only the conson. nom./predic. intens. < /'ab-/ > /'abb-/, SWS. **BS.:** 'to want, to desire, to take a decision': **Ar.** *'abba*, 'tended, directed his course, determine'; *'abbu*, 'intention, projet' (DAF 2); > /'a:ib(a)b-/) > 'desire' > *'a/ibābatu*, 'way of acting, conduct', and by multiple suffix derivation, *'ibbānu*, 'time of preparing or making ready'; also **Eth.:** Ge. *ebbä*, 'to refuse, disobey' (by enant. contrast. alternation of *'abaya*).

Cf. Hurvitz 1913:77; Zaborski 1971:53-54. Moscati 1947:133 presupposes a root /hb/, an alloph. of /'b/; cf. *infra* - The isosemantic series or 'chain': 'to will > desire > love > decide', can be best appreciated in the polysemy of Sp. 'querer', as a reflex of a diversified exercise of will. The possible relationship to /'ab-/ 1) is not clear ('to decide' > 'to act as a father/chief'; 'to prepare himself for a journey [the first decision of a beduin chief]), taking us back to a pre-Semitic level; cf. Eg.: *3bì*, 'to desire, wish for', *3bw*, *3bt*, 'desire' (cf. *infra* /'abaya/); so for the moment it is preferable to presume two independent radical clusters: a PrimW of onomatop. origin and a nom./predic. base of phonological aleatoric formation (possibly even as a triconson. allothesis). - DRS 1 points to the 'resonance' {laryngeal + labial} [/'BY, 'WH, YHB, THB, HBB, HMM/] as a source of allomorphs of this base/seme (?). Cf. also /BB/, /nbb/, for other possible allomorphs (DRS 1) and *infra*.

2b - Second level: expanded base

In the expanded series, the set with prefixes exhibits some relevant expansions of /'ab-/ 2), beginning with the prefix. in EpAram.

/**Ya'aBa**/ Denom. predic. prefix. expan. < /'ab-/ 2)[?] > /ya+'aba/, WS. **BS:** 'to desire': **Heb.** */y'b/, 'to long for', *hapax* in the Bible and Qumran (HALOT 381; DCH IV 70) **Aram.:** EpAram. /y'b/, 'to desire' (DNWSI 431); Syr. *yi'eb*, 'to desire', *yaw'ābā*, 'to desire'.

Cf. Hurvitz 1913:89, Moscati 1947:134. To be compared with /'abaya/ (cf. *infra*) and also Heb. *tā'ab*.

/**Ta'aBa**/ Denom. predic. prefix. expan. < /'ab-/ 2) > /ta+'aba/, WS: **BS:** 'to desire': **Heb.** *tā'ab*, 'to long for'/'to make repulsive', *tā'ăbāh*, 'longing'; JAram. *tĕ'êb*, 'to have a desire' (DTT 1641).

Cf. Hurvitz 1913:95; Moscati 1947:134. Both could be alternative phenotypes of the same biconson. base. The multiple affix. supports this view, although a triconson. allothesis cannot be ruled out here.
The infixed series appears to be sterile; its clusters are apparently semantically unrelated either to /'ab-/ 1) or to 2). Nevertheless, /'awb-/ could represent a denom. predic. by vocal. intens./glide < /'ab-/ 2) as a byform[?] in altern. distrib. of */'ab-/, WS, **BS.:** 'behaving arrogantly, intensively' (?): **Ar.** *'awiba*, 'être en colère' (DAF 67); instead **Aram.:** Syr. *'wb*, Etpa. *'ete'awbat*, 'to burn with desire', could represent a spont. labialization or simply an allomorph also with prefix. /y'b/ (cf. *supra*). The varying semantic concurrence of the three phenotypes /y'b/, /'wb/ and /'by/ (cf. also /'ab(b)-/) seems to indicate them to be distrib., altern. expan. of the base /'ab-/ in the SF of primary subjective reactions. But *non liquet*.
In addition, a second phenotype of /'awb-/ could also represent a denom. predic. by vocal. intens./glide < /'ab-/, by enant. distrib. opposition to /'ab-/ 2) (?), SWS, **BS:** 'return movement' (< 'decision in the opposite direction'): ?**ENA.:** Saf. *'b*, to return' (DRS 11); **Ar.** *'āba*, 'to return, repent, come'; >? meton. derivation Soq. *'yb*, 'to delay, doubt'. Notice the enant. development within this base: 'desire'/'refuse' (cf. *supra*). - For Heb.

ʾôb, 'ghost, spirit', cf. *supra* /ʾab-/ 1). It seems that Tig. *erab*, 'family', has no connection with this base, and the same applies to the multiple Tig. allophones of /ʾlb/.

/**ʾaBaYa**/ Denom. predic. expan. suffix. < /ʾab-/ 2) > /ʾab(a)+ya/, WS/SS. **BS.:** 'to take a decision, positive and negative: to will/refuse' (but cf. /ʾa<u>b</u>-/ 2)): **Heb.** *ʾābā*, 'to be willing > 'satisfy' # 'want' (cf. HALOT 3, for other etymologies; *ʾabî*, 'would that!' could also be taken into account); **NWS:** Phoen. /ʾbyt/, 'desire' (?); **Aram.:** EpAram. *htnʾbw*, 'to long for, covet'(< /nʾb/, DNWSI 710-711, cf. Heb. /nʾp/); JPA *ʾabey* / *ʾabah*, 'to be willing' (DTT 5); **ESA.:** Min. *stʾby*, 'refuser' (DRS 3); **Ar.** *ʾabā(y)*, 'refused, disliked'; **Eth.:** Ge. *ʾabaya*, 'to refuse, be unwilling (to do), revolt, disobey, decline, say no, oppose, resist, reject, deny, disagree' > *ʾəbuy,* 'disobedient', *ʾəbay,* 'disobedience'; Tig. *ʾaba*, 'to refuse, deny, hate' > *ʾabäy*, 'enemy'; Tigñ. *abäyä*, 'to refuse', *abäy*, 'to fail, refuse'; Amh.: *abbäyä* 'to disobey, to rebel'; *abəya* 'refractory ox'; Gur. *abä*, 'to give, allow, permit' (EDG 5, see *waba* and the alternative phenotype *ebbä*, 'refuse, disobey').

As pointed out above (cf. */ʾa<u>b</u>-/ 2), a connection of this expansion with /ab-/ 1) > 'exercise of 'paternal' authority > subjective power 'of the chief', positive and negative'), is not self-evident (cf. *Essai* 77; AA [Eg.-Sem.]: original triconson. base; Murtonen 1989:79f.). Cf. Zaborski 1971:53-54, who quotes also the allomorphs /yaʾaba/ (Heb., Aram. Syr.) and /taʾaba/ (Heb.).

/**ʾaHaB-**/ Denom. predic. infix. expan.(?) < /ʾab-/ 2 > /ʾa+ha+ba/, NWS. **BS:** 'to show a strong desire, love': **Ug.** *ahbt*, 'love'; **Heb.** *ʾāhēb*, 'to like, love'; **Aram.** *,ʾahăbā'*, 'love' (DTT 19).

Cf. Hurvitz 1913:86; Moscati 1947:133 (< /hb/). Other derivations from /ʾab-/ 2) by multiple expan. may be: Aram. *ʾabbāyā(y)*, 'prayer' (DDT 6); Mand.: *ʾabayah* (*ʾabayi*), 'prayer; reader, preceptor'; cf. **AA:** Eg.: *3bì*, 'to desire, wish for' (CDME 2), *3bw, 3bt*, 'desire' (GHÄD 3); cf. Murtonen 1989:79f. Also Amor. *abiʾānum*, 'poor' (ARMT 10 296); Ug. *abyn*, 'poor'; Heb. *ʾebyôn*, 'poor' (HALOT 5: 'to be needy'); DDT 5: 'because he 'longs' for everything') could be a secondary deriv. from */a<u>b</u>-/. However, Eg. *ebyēn*[?], 'miserable, poor', seems to be a Semitic LW (cf. Lambdin 1953:145ff.).

1c - First level: a) simple base

This is a new base constructed from same radical cluster /ʾB/ and in vocalic distribution /ə[i:u]/ # /a/ with the former. The possible semantic relationship of this base to /ʾab-/ 1) cannot be confirmed, nor can the claim of a common base.

/**ʾəB-**/ **PrimW** with possible conson. inten < /ʾəb-/ > /ʾəbb-/, CS. **BS:** 'vegetal germination': **Akk.** *ab/pu*, 'reed-bed, reeds', *apû*, a spiny plant, *apûtu*, a plant > *inbu*, 'frruit, flower'; **Ug.** *ib-*, 'fruit'; **Heb.** *ʾeb(b)*, 'fruit'; MHeb. *ʾeb* (pl. *ʾibbîn*), 'the young shoots of a tree'; **Aram.:** EpAram.: *ʾb*, 'fruit'(?) (DNWSI 3); JAram. *ʾab*, '(perhaps) sprout' (DJA p. 29); *ʾb*(?), *ʾibbā*, '(growing) fruit' (DJPA 73); *i<u>b</u>ʾa*, 'growing fruit' (DJBA 73); > *ʾinbaʾ*, 'fruit, produce' (DTT 80) > by meton. *ʾinbaʾ/ ʾnbʾ*, 'louse's egg, nit' (DJBA 118); Syr. *ʾebbā*, 'fruit'; Mand. *aba*, 'product, swelling'; **Ar.** *ʾabbu*, 'herbage', 'desert first fruit', 'whatever vegetable the earth produces'; **Eth.:** Tig. *ʾabo*, 'a plant', *ʾoba/ʾobo*, 'tree with edible fruit'; Gur. *eba*, 'kind of tree', *ebbäbä* 'bloom, blossom, flower', *(a)näbbäbä*, 'bloom, blossom, flower' [but a possible deriv. < Cush. must be taken into account] and possibly by epenthetic deriv. >? *atəba*, 'a small tree with sweet edible root'; Tigñ. *abo*, 'evergreen tree', *oba, obo*, 'a kind of tree'; Amh. *at(t)äbu*, 'a kind of tree which has white flowers'.

Cf. Murtonen 1989:79. Akk. *i/en/mbu(m)*, 'fruit, flower', 'flower(-shaped jewellery)', suggests a possible dissimilation (/'əb-/ > /'əbb-/, /'ənb-/), rather than a derivation from < /ᶜ-n-b/, (cf. AHw 234; LS 2). See also JAram. *'inba'*, 'fruit, produce' (DTT 80). On the other hand, cf. Ug. *'ib-*, by metaph. shift > 'gem, precious stone' (cf. Lat. 'gemma'), also > Akk. *eb(b)u*, 'pure, brilliant' and. Mand. *aba*, 'to bring' > 'to shine forth'. However, speculations on the correspondence of the bases /'-n-b/ and /ᶜ-n-b/ (< /n-b-/) must be set aside for the moment, but possible root contamination should be taken into account. On the other hand, Syr. *hab(b)*, *hawbobo*, 'to flower', *habtā*, 'flower', may represent another allomorphic base.

Also, a feasible allomorphic expansion and intensification /n{'}bb/ of the same base may be found in Akk. *ebbūbu(m)*, *enbūbu(m)*, *embūbu(m)* (?), 'flute, pipe' (cf. *ab/pu*, 'reed-bed, reeds', *appu(m)*, 'tube , socket'); >? MHeb. *'abbūb*, *'ibbūb*, 'reed, flute, pipe, tube' (DTT 3); JAram. *'abwb'a* (abs. *'bwb*), *'ybwb*, 'flute' (DJBA 74; DJPA 32), *'abbūb*, *'abbūbā'*, 'reed, flute, pipe, tube' (DTT 3); Syr. *'abbūbā'(tā)*, 'flute'; Mand. *ambuba*, *anbuba* (Ar. LW), 'tube, flute, (reed-)pipe'; Ar. *'unbūbatu*, 'An internodal portion of a reed or cane', possible metathesis *'ubnatu*, 'a knot in a wood'. This is a multiple prefix. expansion (cf. Akk. and Ar.), with assimilation in NWS (DRS 1f.). Semantically there is an isosemantic chain of shifts: material (reed) > instrument (flute) > sound (cry) (or the other way round: sound < flute < reed, if we accept the onomatopoeic base (-bb) as original; cf. DRS 1f.). - Cf. **AA:** Eg. *ib*, 'part of a plant', 'a sort of tree' (WÄS I 60); **'baw*, 'a plant' (HSED 2). - **SF:** Flora.

1c - First level: b) intensified base

/**'aB**-/ Denom. predic. and deverb. by conson. intens./gemin. < /'əb-/ > /'ab-ba/, CS. **BS.:** 'to be fruitful': **Aram.:** *ᵃᵃbab*, 'to grow, ripen' (DTT p. 2) > *'abbā'*, 'thickets, woods, grove' (DTT 2); **Eth.:** Tig. *'ämbäbä*, 'to flower'; Tigñ. *'ambäbä*, 'to flower'; Amh. *abbäbä*, 'to flower, bloom, blossom ...'; Gur. *ebbäbä*, 'bloom, blossom, flower'. As deverb. noun by gemin./reduplic. ('action noun of the previous base'): **Akk.** *ababu*, 'forest'; **NWS:** Pun. *'bb*(?), 'spring-fruit'; **Heb.** *'ābîb*, 'ear', by meton. 'spring' (< 'ear time'); **Aram.:** JAram. *'abbā'*, 'thickets, woods, grove' (DTT 2), *'abyb* (*'abyb'a*), 'early stage of ripening, spring' (DTT 5f.; DJPA 32); Syr. *hababā*, 'flos' (?) (allomorphic?; cf. *supra*); Mand.: *ababia*, 'thickets, dense growth'.

Heb.: **'ābab*, 'to be thick, to be heavy, to press; to surround; to twist; to be warm, to glow', quoted by DTT p. 2, does not exist as a verbal base in Biblical Hebrew (cf. HALOT 2). In this connexion, note the correspondence with the resonances /'b/, /ḥb/, /gb/, /kb/, /qb/ and /'bd/, /'bl/, /'bq/, /'br/, /'bs/, /'bḫ/, /ḥbb/ (cf. also DRS 1, {laryngeal+labial}). However, the option of an onomatopoeic etymon by repetition of the labial (DRS 2) does not seem acceptable. For a possible relationship to the root /ᶜ-n-b/ cf. *supra*.

2c - Second level: expanded base

This base furnishes only a suffixed expansion /-ya/ with a factitive/effective semantic nuance and in clear areal distribution with /'ab-/. The NWS semantic development is clearly secondary.

/**'aBaYa**/ Denom. predic. by suffix expan < /'eb-/ > /'ab(a)+ya/, ES/WS. **BS**: 'to produce fruit, to fructify': **Aram.:** Mand. *aba*, 'to bring out, to swell out, to shine forth' >< *aba*, 'product', 'swelling'. From this base may also be derived < **Akk.** *apû* II and *apûtu(m)*, 'a plant' (cf. Akk. *abu*, *apu*, 'reed-bed, reeds' *supra*); *abiyānu*, 'a plant' (AHw 6); as well a **Heb.** *'ēbe*(?), 'reed, papyrus' (*hapax* Job 9:26). - As a metonymic shift from /'abaya/ with the **BS:** 'result of being fruitful': **Mand.** *aba*, 'to be

thick, dark', *aba*, 'darkness, thickness, denseness' > by intens. +expan. *ababia*, 'thickets, dense growth'. Possibly also Akk. *abbuttu(m)*, 'a hair-style'.

The best witness of a semantic shift and radical contamination is to be seen in Mand. ABA I, ᶜBA I, 'to be thick, become thick, dense, dark'; ABA II, ᶜBA II, ᶜBB, 'to bring out, come out, swell out', 'to grow hot, shine forth, glow'. In this connexion, a possible allophony or root contamination with /ᶜb/ and the seme 'to cover, veil ...' has to be taken into account (cf. *supra* on /'ab̲-/).

An expan. prefix. may be seen in /na'ab-/ as a denom. predic. with privat./enant. < /'əb-/ > /'na+'ab:pa/, ES. **BS:** 'to lose fertility': **Akk.** *na'āpu(m)*, 'to be(come) dry'.

3 - Homographs/Loanwords

The cluster /'b/ offers a series of radical homographs which cannot derive from the bases identified:

Heb. hapax *'ôb*, 'bag (skin) for wine made of leather', Job 32:19 (HALOT 20) has a possible reflex in Akk. *apu*, 'a leather object[?]', and in the hypothetical Ar. *'awwaba*, 'tailler (le cuir) en rond[?]' (DRS 11) and even in Ar. *'ayyabu*, 'porteur d'eau'[?] (DRS 11), not to be found in AEL or in DAE (but cf. Lisan I 143: *šāqqā'*). Cf. also the possible prefix. and infix. expansions: Ar. *sa'bu*, *mis'abu*, 'skin, receptacle of skin', *'ihābu*, 'skin, hide'; and the more problematic Amh. *arräbä*, 'to make Moroccan leather' (?). In this sense above all CS /š'b/, 'to draw water (with a skinbag)' (Murtonen 1989:407) could be considered as a possible /š-/ prefix. expansion, linked (?) with Heb. *'ôb*, mentioned above. In any case, its derivation from /ab̲/ 1) > /'āb/ > Heb. /ôb/, 'spirit, ghost', is uncertain in respect of the semantic shift involved. Cf. Rubiato/Lara/Gaviria 1991:145-162. The possibility that it is a LW/KW should be taken into account.

Akk. *abbû*, 'swamp fauna' (> *abbu* 'swamp'); JAram. *'ybw*, 'an unclean bird'; Syr. *'abbā'*, 'crocodile' (generically related to Eg. *3by*, 'panther', *3bw*, 'elephant'); Gur. *abba*, 'leopard, tiger'. Also Akk. *abāya*, 'a water fowl', *abbunnu*, 'a kind of bird', *abūtu*, *abūtānu*, 'fish' (AA, cf. *Essai* 77; HSED 3). The water animals may be related to /'ab̲-/ (cf. *supra*), as is fairly clear in Akk.; the other designations may be semantic expansion. Other radical homographs, such as Ar. *'abbaba*, 'to shout, scream' (DAF 2), and by metonymic gestural deriv. >? Ar. *'abba* (?), 'to be astonished' (DAF 2), Tig. *'abbä*, 'to scream, shout', point to an allothesis of /y-b-b/, 'to put out a strong cry' (< /BB/ (?), of onomatopoeic origin; DRS 1f.) as corroborated by Heb. *yibbeb*, 'to lament'; JAram., *yabbeb*, 'to sound an alarm, a trumpet'; Syr. *yabeb*, 'to play the trumpet, to shout with joy, exult'; Ge. *yab(b)aba*, 'to jubilate, shout with joy', (cf. DRS 1f). Also from this allothetic cluster /y:h-b(-b)/ could derive (?) Amh. *eba*, 'monkey, monkey's cry', *anäbba* 'to cry, shed tears'. Cf. possibly also Gur. *əmbʷa *balä*, 'low, moo'. On the other hand, MHeb. *yibbēb*, 'to speak in a trembling voice, to lament' (DTT 560), JAram. *yᵉbab*, 'to sound an alarm' (DTT 560) and Mand. /YBB/, 'to make a hollow sound, to groan', possibly indicate a contamination of bases (/nbb/, /ybb/). Another allothesis may also be found in Ar. *hab(a)ba*, 'to blow the wind'. For Ug. *ib* cf. Heb. *'ōyyēb*; Akk. *ayyābu(m)*, 'enemy' < /'yb/ in alternation with /w'b/, Ar. *wa'aba*, 'to contract oneself', 'to be disdainful', *wa'iba*, 'to be angry'; in my opinion it cannot be taken semantically as an expan. infix. of /'ab-, 'əb-/ (cf. Murtonen 1989:89)

The claimed **AA** root *'ab-*, 'stone', from which > CS /'bn/, on the basis of the only attestation in Cush, is not very convincing (HSED 1f.), especially when another common and better attested AA root *'abun-* is postulated.

Akk. *apītu*, a type of fallow land < *ab/pu*, 'reed-bed, reeds'.

/'aD-/

1 - First level: a) simple base

/'aD-/   **PrimW** with possible internal intens. < /'ad-/ > /'add-/, /'ād-/, WS. **BS:** 'original force, power' > 'father' > with the semantic bias 'lord': **Amor.:** *ad*, 'father' (APNMT 156, but not in CAAA); **Ug.** *'ad*, 'father'; **NWS:** Phoen., Pun.: *'d*, 'lord' (The assimilation of /-n/, does not seem probable; cf. *infra* /'dn/). There is a curious semantic transformation in **Gur.:** *adi*, 'mother!, mistress!, lady', form of address to an elderly woman, and also *addoyye*, 'form of address which older women of the same age use when speaking to one another'; < possibly determined by the semantic shift to female family relatives in AA (HSED 6).

The parallel *Addu//Baᶜlu* is not valid (< /hdd/); and a Sem. *'ad-, 'lady', does not exist (HSED 8; cf. Diakonoff/Kogan 1996:27.- **SF:** 'Society/family' > hierarchy/power relationship.

1 - First level: b) intensified base

/'aD-/ Denom. deriv. by vowel intens. < /'ad-/ > /'ād-/, WS. **BS: Heb.:** *('al) 'ōdōt*, 'for the account, reason of/that' (cf. Eng./Sp. 'by force/virtue of'); **Ar.:** *'āday*, 'the most effectual thing', by vowel intens. + suff. expan.

/'aD-/ Denom. predic./design. by conson. intens./gemin. < /'ad-/ > /'adda/, E/SS. **BS:** to 'act with unconstrained force > to carry out', with positive // negative (enant.ˀ) nuance: **Ar.** *'adda*, 'to oppress' // > 'to arrive' (by semantic shift (?) 'to show force' > 'to moo, low'), *ta'addada*, 'to act with forced harness', *'a/id(d)u*, 'strength, power, force', 'wonderful thing'/'abominable thing, calamity'; cf. **Akk.** *ū/ud(d)u*, 'distress, affliction'; *addu* 'throwstick', possibly by semantic metaph. shift (or KW).

Cf. Zaborski 1971:54, who quotes both Ar. *'āda* and *'adda*, 'to oppress'. Saf. *wdd*, 'calamity' (?), which seems to be an allophone of /'dd/ (cf. DRS 8), and *'ad-* a contrastive one as well (cf. *infra*); also Murtonen 1989:89.

2 - Second level: expanded base

Prefix. expansions of this base are not certain, but the following can be considered:

/Ma'aD-/ Denom. predic./design. by prefix. /m-/ < /'ad-/ > /ma+'ad(a)/, E/WS. **BS:** '(to be) abundant': **Akk.** *ma'du*, *mādu*, 'to be(come) many', *ma'dû*, '(large) quantity, abundance'; **Ug.** /m'd/, *mu/a/id*, 'to be immense', 'abundance'; **Heb.:** EpHeb. *m'd*, 'very, much', Heb., MHeb. *mĕ'ōd*, 'strength, power', 'very' (Murtonen 1989:253), in parallel with **ESA** *n'd*, 'luxuriance', 'luxuriant crops'. And taking into account the quoted enant. value of Ar. *'a/id(d)u*, 'strength, power, force', 'wonderful thing'/'abominable thing, calamity'; Akk. *ū/ud(d)u*, 'eine Bedrängnis', one could see another prefix. expan. in Ar. *na'ada*, 'a calamity befell him', *na'du*, 'calamity'.

Cf. Hurvitz 1913:88, who suggests a deriv. < /md/. The alternation of morpheme prefix. favours a derivation from a common base /'ad/.

As for infix. expansion, the following may be taken as an expan. glide (cf. *supra* /'ad-/):

/'aYaDa/ Denom. predic./design. by infix. expan. /-ya-/ < /'ad-/ < /'a+y(a)+da/, WS/SS. **BS:** 'to show force, power': **Ar.:** *'ayada*, 'to be strong', *'aydu*, 'strong', *'iyād*, 'anything strengthening' >? Amh.: *ayyädä*, 'to determine, to define, delimit, to decide'; and possibly by enant. **Heb.:** *'ê(y)d*, 'final disaster'.

Finally, among the suffix. expan. the following are to be taken into account:

/'aDaWa/ Denom. predic./design. by suff. expan. /-y:wa/ < /'ad-/ > /'ad(a)+wa/, E/SWS. **BS.:** 'to show superior, dominant position or power': **Ar.** *'adā(w)*, 'to (be) equip(ped), provide(d) with the necessary ...', *'adātu*, 'instrument', *'adiyyu*, 'armour, device' (DAF 20); cf. **Akk.** *udû*, 'Utensilien' (AHw 1401); also Ar. *'adā(y)*, 'to cause, arrive' (cf. *supra 'adda*).

/'aDaYa/ Denom. predic./design. by suff. expan. /-y:wa/ < /'ad-/ > /'ad(a)+ya/, E/WS. **BS.:-** 'to exert/suffer a superior/inferior dominant (economic) power', by enant. [cf. Sp. 'deudo']; the economic semantic bias is clearly a derived one < as a power relationship (cf. Eng. 'impost' < Lat. 'in-ponere', for 'tax']: **Akk.** *idum*, 'wage, rental' (CDA 15 <? *idum*, 'hand'); Ug. ud, 'pay, payment' (?); **Aram.:** Syr. *'adî*, 'to provide'; **Ar.** *'adā(y)*, 'to cause to reach', *'adā'*, 'the act of causing to reach, performance'; **SS:** Amh. *əda*, 'debt; tax, fiscal impost', *adäyyä*, 'to return, pay back'; an allomorph alternation may be seen in Tig. *awädä*, '1. to cause to have'. 2. to owe'.

/'aDān-/ Denom. deriv. by suff. expan. /-n/ < /'d-/ > /'ad+ān-/, NWS. **BS:** 'owner of power': Ug. *'adn*, 'lord', *'adt*, 'lady'; **NWS:** Phoen., EpHeb., EpAram., Nab., Palm.: *'dn*, *'dt*, 'lord, lady'; **Heb.** *'ādôn*, 'lord, master' (but cf. DRS 8); **Aram.:** JAram. *'dwn*, 'guardian of a woman'.

As for Heb. *'eden*, 'pedestal, base'; JAram. *'udnā'*, 'footstool' (DTT 22; Murtonen 1989:83, related to /hdm/, 'footstool'?; cf. Watson 1996:19; Watson 1997:89-95), we are possibly dealing with a KW, as is also the case with Akk. *adattu*, 'succulent part of reed' (cf. AHw 12: 'nest, camp'); the semantic shift that generated these semes is not clear, nor is the relationship between them to claim a deriv. < /'ad-/. Note that Phoen. *'dn* is of uncertain reading and meaning (DNWSI 17).

Even more objectionable would be a derivation from /'ad-/ of NWS /'d-m/: Amor. DN /'admu/ (Buccellati 1966:130; CAAA 13, 46f.); Ebl.: *ad-mu*, 'man' (PET 75); Ug. *adm*, 'man', 'mankind'; Phoen., Pun., EHeb: *'dm*, 'man'; Heb. *'ādām*, 'mankind, man'; JAram. *'ādām*, 'Adam' (TDD 17; cf. Ar.: *'adamu*, *'adamiyyu*, 'Adam, human', a Aram.-Heb. LW), as the most powerful being, the 'lord' *kat'exoché*, but contrast ESA *'dm*, 'vassal', *'dm$^?$*, 'to put up resistance', *t'dm*, 'military mission', where the seme 'strength' (suffered and exerted) is more apparent. In this case, it should be separated from the root /'dm/, 'red' > *ădāmā*, 'earth', *adīmu*, 'tanned skin', from which is usually seman. derived through Heb. *'ādām*. < *'adamu*, 'mixed, brown colour' (cf. HSED 5; Murtonen 1989:83; CEDHL 7).

The same can be said of the lexeme /ad-r/: Ug. *adr*, 'wonderful, strong'; Phoen. *'dr*, 'to be mighty'; Heb. *'addîr*, 'mighty, magnificent'; JPAram. *'dyr*, 'mighty'; JBAram. *'ădîrûtā'*, 'glory' (cf. Murtonen 1989:83).

3 - Homographs/Loanwords

*/'əd-/ LW < Sum. *a-dé-a*, 'flood from the deep' > Akk. *edūm*, 'flood, wave'; Heb. *'ēd*, 'subterranean stream, groundwater' ('an apocopated form of *'d^{c}'[?]; cf. DTT 15); Gur. *äddiyä*, 'river' [intens.+ expans]. In connexion

with this base, the following may also be considered: Ar. *na'ada*, 'to make water spout to the surface', *na'du*, 'spouting water' (DAF 1176); Soq., *n'd*, 'to bring water' < Meh. *'ānāt, ḫe-nîd*, 'waterskin'; Šḫ. *'ánít, nid*, 'waterskin´; and Heb. *nô'd*, 'leather bottle'; JAram. *nôdā'*, 'leather bottle' (DTT 884), better taken as a LW < Akk. *nādu*, '(water-)skin', than as a prefix. /n-/ expansion of an original Sem. base or of the adduced Sum. noun (LW). See also JAram. *'aša/êd*, 'to pour out' (DTT 126). Its possible relationship to /'ad-/, as an expression of primary force (cf. *supra*), is uncertain. But cf. the isosemantic chain /'ab-/ > /'ab̲-/ *supra*. If correct, a possible Semitic apophonic primary base */'əd-/, from which all those phenotypes may derive, including the Sum. lexeme, should not be ruled out.

/'aD̲-/

1a - First level: simple base

*/'aD̲-/ (?) **PrimW**, WS. **BS:** 'a bad accident or damage in the general sense of disturbance of the usual state of affairs: disposition [order], colour, flow ...': **Ar.** *'adda*, 'to cut, split' (DAF 20: cf. DRS 10).

The simple base is only documented in its expanded form. Possibly /'ad-/ // /'ad̲-/ is in contrastive opposition, or due to contamination or allophony. - **SF:** General situation.

2a - Second level : expanded base

/'aD̲aYa/ Denom. predic. by expan. suffix. /-ya/ < /'ad̲-/, /'ad̲ (a)+ya/, SW/SES. **BS:** 'to produce an */'ad̲-/ of any kind': **ENA:** Lih. *'dy*, 'to cause unrest' (DRS 10); **Ar.** *'adiya*, 'to annoy, harm, hurt', 'experience an evil' > *'ada(y)n*, 'annoyance, harm', *'adiyatu*, 'evil thing' (AEL 44). **Eth.:** Ge. *'ozā*, 'one who does an injustice'; Tgr. *'ada*, 'to do harm'; Amh. *əzəh*, 'exudate serum from a wound'; Gur. *ozä*, 'evil eye', 'a person who has the power of casting the evil eye'; Har. *azā'*, 'gêner' (DRS 10).

There is a possible phonetic alternation (allophony) of dental phonemes: /'-d(-y)/ // /'-d̲(-y)/. Ar. *'ādiyyu*, 'vehement waves', is possibly a metaph. shift (> 'that harms, destroys', cf. Sp. 'rompientes').
As a possible infix. expan. /-r-/, cf. Amh. *arräzä*, 'to wear out, become threadbare (clothing); to be wanting, lacking, deficient', but the lack of parallels precludes certainty.

1b - First level: simple base

*/'əD̲-/ **PrimW** SW/SES. **BS:** 'past time (?)'/'moment, point in time': **Ug.** *'id*, 'temporal adv. functor', 'postpositive temporal adv. morpheme', 'narrative adv. functor 'then'' (with syntag. adv., expan. /-ka: idk); **Heb.** *'āz*, 'then' (with progr. vocal. assim. to laryng.); **NWS:** EpHeb., EpAram. *'z*, 'then'; **Aram.:** BAram. *'edayin*, 'then'; **ESA:** Sab. *'ad̲*, 'when'; **Ar.** *'id̲*, 'a word denoting past time: 'then'', *'id̲ā*, 'denotes a thing happening suddenly: lo, behold!', *'id̲-ān*, 'then' (expan. /ān/), *'idda-ka, 'idā-ma*; and possibly Gur. *azäz*, 'beginning of group mourning early in the day', by conson. intens. /gemin. and contamination[?] with /'ad̲-/.

Cf. *supra*. Ug. and Ar. syntag. functors of this base can be found in: **Aram.:** EpAram., JPAram., Syr. *hāidên*, 'then'; **ETH.:** Ge. *yə'əze*, 'now', *mā'əze*, 'when?'; Tig. *'azē*, 'how'. A possible etymological relationship with the determinative functor /d̲/ is not to be ruled out; cf. Monoconsonantal 52f.; DRS 10. - **SF:** 'Time', 'time precision'.

Among the possible expansions of this base to be taken into account, one could consider the suffix. Aram./Heb. /'zl/, 'to go away' (cf. Ar. *'azaliyyu*, 'long since past, eternal' [DAF 29]), but this entails a somewhat irregular phonetic correspondence); more probably they are allophones. Also ESA *'ḏn*, 'to dismiss, to allow s.o. to depart' (SD 2), could also be taken into consideration.

/'aḌ -/

1 - First level: a) simple base

*/'aḌ -/ Original, no attested simple base. **BS:** 'penible sensation, oppressing'.

This base is to be distinguished semantically from /'əṣ-/ (cf. *infra*), although both are very close to each other and dialectal contamination cannot be excluded, as is possibly the case in Tig. and in Heb. Cf. also *supra* /'a<u>d</u>/ (and even /'ad-/) as a possible original resonance allophone. - **SF:** Basic sensation.

b) intensified base

/'a<u>D</u>a/ Denom. predic. By conson. intens. < /'a ḍ-/ > /'ḍḍa/, SW/SS. **BS:** 'to cause pain, <to oppress': Ar. *'aḍḍa*, 'to affect painfully, to torment s.o.' (DFA 37) > Har. *'aḍḍ*, 'pain, suffering' (DRS 31); and with causative value > Tgr, *'adda*, 'to yoke' < 'to cause oppression'.

/'**a**<u>D</u>**a**/ Denom. predic. by vocal. intens. < /'a<u>d</u>-/ > /'ā<u>d</u>a/**,** NWS. **BS:** 'to exert pressure upon': Heb. *'āṣ*, 'to urge, be in haste'. In contrasting intens. distribution with the former: Ar. *'aḍḍa*.

No affix. expansion of this base can be identified with certainty. Possibly Ar. *'aḍima*, 'to be angry against, to persecute s.o.' (DAF 38) and, as privative/enant. derivation, Ar. *'amiḍa*, 'to be indifferent to offences' (DAF 55) could be considered expansions of it as psychological reactions.
The consonantal homograph *'aḍā*, 'pond' (DAF 38) apparently has nothing to do with the base in question, on the other hand, Sab. *'ẓy*, 'trouble, distress' may represent an alternative allophone of this cluster (SD 11; cf. supra /'a<u>d</u>aya/)**.**

/'vG-/

1 - First level: a) simple base

*/'a:əG-/ **PrimW** < Universal semantic: 'fire/burning', not attested as simple base in Semitic.

Cf. **AA** *'ug-, 'to burn' (HSED 33; cf. also *aḫ-, 'fire', HSED 7). Possible allophone of Nostr.: *hag-/*həg, 'to burn, to be on fire' (NMF 588f.), but cf. *infra* on /'aggān/ - **SF:** Natural Phenomena: fire.

b) intensified base

/'a<u>G</u>a/ Denom. predic. by conson. intens. < */'əg-/ > /'agga/, E/WSS. **BS**.: 'to set fire': by psychosomatic metaph. > **Akk.** *agāgu*, 'to become furious', *aggu*, *akku*, 'furious'; **SWS:** Tham. *'g*, 'burn!' (DRS 10); **Ar.** *'ağğa*, 'to burn, flame fiercely'; allomorph *hağğa*, 'to burn fiercely (of fire)' (cf. also AHw 14 < *hāgīg*, but cf. /hg/ *infra*) and derivatives; possibly **Eth.:** Har. *ağğu-(be)*, 'soon' (DRS 6).

2 - Second level: expanded base

In the same SF the expansions of this base are almost non-existent. Only two suffixed expansions may be related to it:

/'aGaMa/ Denom. predic. by conson. expan. /-m/ <? */'əG-/ > /'aga+ma/ E/WS. **BS:** 'to burn hot, glow', by metaph. shift: < **Akk.** *agāmu*, 'to be furious'; **Heb.:** *'agām*, 'to glow'; **Ar.:** *'ağama*, 'to loath so.' < 'to be angry against s.o.', 'to be glowing', *'ağmu*, 'anger' (DAF 14).

/'aGGāN-/ Denom. deriv. (LW[?]) by intens. and suffix. expan. /-n/ < */'əg-/ > /'agg+ān-/, E/NWS. **BS:** 'container (to be put on fire)[?]': **Akk.** *agannu*, 'bowl, cauldron'; Ug.: *agn*, 'cauldron, earthenware bowl'; **NWS:** Phoen., EpHeb. EpAram., Nab. Palm. *'gn(')*, *ag-ga(n)-nu*, 'crater, open bowl, basin'; **Heb.:** *'aggān*, 'bowl'; **Aram.:** JAram. *'aggānā'*, 'basin, kettle, bowl'; Syr. *'aggānā'*, 'bowl' > by semantic metaph. shift > 'wheels and axes', 'capital (of a column)', 'disease of inverted eyelids'; Mand. pl. *agania*, 'bowls, wine-pots, vessels'; **Ar.:** *'iğğanatu*, 'a vessel in which clothes are washed' > by metaph. shift *'uğnatu*, 'the ball or elevated part of the cheek'; **Eth.:** Ge. *ᶜaygan (< ʾaygan)*, *ganᶜ*, 'basin, tub, pitcher', 'big jar, cauldron'; Tig.: *gänə'*, 'big vat'; Tigñ.: *gän'i*, 'tank, vat'; Amh. *gan*, 'large eartthenware container' (by apheresis of /'-/); Gur.: *gan*, 'jar for water'.

This CS lexeme can be considered an expan. suffix. /-n/ of < **/'əg-/** > /'aggān-/, 'container originally related to fire'. It is well attested in all the Semitic families and so must be very primitive. Cf. also **AA:** /'igan/, 'vessel' (HSED 25; *Essai* 78; De Calice 1936:123; Murtonen 1989:82; Rubiato 1986:411-420); Eg. *ìkn*, 'cup, jar' (CDME 32, *jkn*, GHÄD 109) // Eg.: *ìkn*, 'to draw water'; Ber. *tikint*, 'vessel' (*Essai* 79); Chad.: EChad. *jùgùnéy*, 'calabash'[?] (ChLR I 25); Cush. *gān*, 'jar' (Essai 79). As for the morphol. deriv. cf. *'ad/'adn* and other couples (DRS 7). - In this connexion we could consider the base as related to **IE:** *egnis/ognis*, 'fire' (IEW 293): Sansk. *ag-ní-*, 'fire, sacrificial fire', *agní-dhāna*, 'receptacle for the sacred fire' (SED 5); Hitt. *Agnis, ag-anni-*, 'plate' (HEG 10: 'Wanderwort'); Lat. *ig-nis*, 'fire' (DELL 451). But the /-n/ seems to be 'radical' in IE and the lexeme means 'fire' not 'container' (but cf. Hitt.). Consequently an **AA** primary origin is more probable (but cf. supra AA *'ug-, to burn', which will play for an expansive origin of the /-n/). – Note that Palm. *'agn* and *'agm* (DNWSI 9f.) are of unknown meaning.
On the other hand, a root /'g/, Ar. /'ğ/ > *'ağğa*, 'to run'/'courir' (Hava 3; cf. Bohas-Chekayri 1993:11), seems instead to be a secondary semantic shift (poetic(?), said of that proverbially swift bird, the ostrich) of the well attested homograph already quoted; as for Ar. *'ağa'a*, 'fuir' (DAF 13), a relationship to the root /g'/ is preferable. Both phenotypes are rare in Arabic (dialectal?).

3 - Homographs/Loanwords

Two of the various consonantic homographs of this cluster could have deriv. semantic relationship to */'əg-/ > */'əg-ay:'-/ [expanded or originally triconson. /'-g-'/[?]]: Heb. *'ēgē'* (recall the pun of the 'burning bush' of Ex. 4:), MHeb. *'ēgeh* (DTT 11); EpAram. *'g'*, Mand. *aga*, 'thorn, thorn-bush'; Tig.: *age*, 'kind of rush' >? Amh. *agam*, 'a thorny bush' (*Carissa edulis*)'; Tig. *aməgge,* 'a sort of maize', *šə'eg*, 'a bush'; Gur. *agam, agām*, 'kind of tree'; *agäl*, 'kind of cereal'; *anigo*, 'kind of tree' (cf. Akk. *egū*, 'a kind of camel-thorn'). The relationship is more difficult to define in the case of Akk. *egū, eqū*, 'antimony' (KW/LW[?]).

/'aH/

1 - First level: a) simple base

/'aH/ Exclamative primary functor N/SW/SS. **BS:** 'exclamation, usually of pain', 'helas!', 'ah!': **Aram.:** Syr. *'ah, 'ahā*; Meh /'hy/, *'ōhi*, ho! 4; **Ar.** *'ah*, and by diferent expan. *'ahi, hāh, 'āha*; by positive semantic shift **MSA:** Meh. *'ahā/ɛhē*, 'yes', 'ah!', 'ja!'; **Eth.:** Ge. *'ah*, (CDG 9); Tig. *'ah, 'eh; aho*, 'okey!', also used as a cry to camels (WTS 348); and by different conson. suff. Tig. *ahoye*, interj.; Amh. *əhew*, '(exclamation) here! look! so!'; Gur. *ohon*, 'all right'.

Of onomatopoeic origin in most languages, Semitic and others: laryngeal symphoneme/resonance. Cf. Monoconsonantal 53f. Alloph. /'aḫ/. - **SF:** Deixis, supraseg. expressionism.

1 – First level: b) intensified base

/'a<u>H</u>-/ Deriv. predic. by conson. intens./gemin. < /'ah/ > /'ahha/, SW/SS. **BS.:** 'to bring out an /'ah/ cry': **Ar.** *'ahha*, 'to cry', also the phenotypes *'ahhi, 'ahah, 'ahhah*; by meton. deriv. > Ar. *'ahhat*, 'tristesse', 'affliction'; also as exclamation **Heb.** *'ăhāh*, 'alas!' (HALOT 18); **Eth.:** Tig.[?] *'aha belä*, 'to call' < 'to utter a cry' (cf. Cat. 'cridar'); Amh. *ahah*, exclam. of surprise, *ahehe*, 'cry of mourning, pain or sorrow' (AED 1091).

2 - Second level: expanded base

/'aW:YaH-/ Deriv. predic. by expan. glide /-w:y-/, < /'ah/ > /'a+w:ya+ha/, SWS. **BS:** 'to utter a cry of grief': **Ar.** **'āha, 'awwaha, ta'awwaha, 'ayyaha* 'to say *āhi*, from a motive of pain, ... affection, pity ..., to cry', and the byforms *'āhi, 'āwh, 'āwhi, 'āwi(n), wāhan, hāh, hāhu* ...; > *'īh, 'īha(n)*, a command 'be silent'.

This expansion can also be considered a vocalic intensification, as usual. There is no other expansion, in keeping with the onomatopoeic nature of the lexeme.

/'aḪ-/

1 - First level: simple base

/'aḪ-/ 1) PrimW, CS. **BS:** 'near colateral relative' > 'brother': **Akk.** *aḫum/aḫ(ḫ)ātum*, 'brother'/'sister'; **Ug.** *'a/i/uḫ/'aḫt*, 'brother'/'sister'; **Heb.** *'aḫ(u)/ 'aḫôt*, 'brother'/'sister'; **NWS:** Phoen.-Pun., EpAram., Nab., Palm., Hatr. *' ḫ(w)/'ḫt*, 'brother'/'sister'; **Aram.:** JAram. *'aḫā'/tā'*, 'brother'/'sister'; Syr. *'aḫā/tā*, 'brother'/'sister'; Mand. *aha/ta*, 'brother'/'sister'; **Ar.:** Saf./Lih. *'ḫ-t*, 'sister' (DRS 15); **Ar.** *'aḫū/'uḫtu*, 'brother'/'sister'; **MSA:** Meh. *ġā/ġayw*, 'brother', *ġayt/ġáwtən*, 'sister'; Soq. *'aᶜḫat*, *'eᶜḫet* 'brother'/'sister'; Jibb. *'aġa/ġit*, 'brother'/'sister'; **Eth.:** Ge. *'əḫəw, 'əḫʷ/'əḫətt*, 'brother'/'sister'; Tig. *ḫu/et*, 'brother'/'sister'; Tigñ. *ḫawti*, 'sister'; Amh. *et*, 'brother' > *əhət*, 'sister'; Gur. *ət*, 'brother'/'sister'; Har. *əḫit*, 'younger sister'. By metaph. shift > 'something at one's side', 'side' ('affluent, riverside, shore'): **Akk.** *aḫum*, 'arm', 'side', 'shore', 'bank of the river', 'field', 'part share' > *aḫûm*, 'outsider, strange' (> 'one from the border'); **Ug.** *'aḫ*, 'shore'; **Heb.** *'āḫû*, 'sedge'. It is not necessary, therefore, to postulate a new AA root **'aq-*, 'field' (HSED 14). The semant. shift is

ancient, as Eg. *3ḫt*, 'field', proves. In this case, Murtonen 1989:87 posits a second base as a LW from Eg.

Cf. Murtonen 1989:87. One of the 'six nouns'; cf. /'ab-/. The problem of case lengthening of the /-u/ or gemination, as in *'ab-*, is involved here, because of the archaism and persistence of the case system in this field; cf. DRS 15. - **AA:** **'aḫ (HSED 7). Given this AA ancestry, the seme 'brother' seems more original in relation to 'side', even if this seme is more generic. Phonologically, a {pharyngeal + labial} symphoneme seems to be operative in this field: /'+ḫ/, /'+b:m:/, /ᶜ+m/, but /b+n/. Universal semantic. - **SF:** 'Family relationship'.
As a possible suffixed /-r/ expansion of /'aḫ-/, 'Bruder', Eilers 1987-1988:4 suggests *'aḫar,* 'anderer'.

/'aḪ-/ 2) Exclamative primary functor WS. **BS:** 'exclamation, usually of disgust: **Ar.** *'aḫ,* 'puaf!'; **Heb.** **'ōḫ,* 'howling desert animal' (HALOT 29: 'onomatopoeic word').

Cf. Murtonen 1989:87. Of onomatopoeic origin, intensified *'ah* (?) or an allophonic variant: laryngo-pharyngeal resonance: /'ah, 'aḥ, 'aḫ/. The difference lies in the suprasegmental delivery (cf. /rûḫ:ḫ/). - **SF:** Deixis, supraseg. expressionism.
While no prefix. and suff. expansions of this clauster can be identified, an apparent infix. expansion /'nḫ:ḫ / may be considered:

/'aNaḪa/ Denom. deriv. predic. by infix. /-n-/ expansion < 'aḫ/ > /'a+n(a)-ḫa /, E/WS. **BS:** 'to express bad mood': **Akk.** *anāḫu,* 'to be(come) tired' >< 'to sigh'; **Ug.** *'anḫ,* 'complaining'; **Heb.** **/'nḫ/, ne'ĕnḫā,* 'to groan'.

2 - Second level: expanded base

/'aḪaWa-/ Denom. nomin./predic. expan./-ya/ < /'aḫ-/ 1) > /'aḫ(a)+wa/, CS. **BS:** 'to become a brother, tied to': **Akk.** *aḫû(m)* GT, 'to fraternise, conspire'; Heb. /'ḫḫ/ N, 'to fraternise'; **Aram.:** JAram. /'ḫy/**,** *'āḫāh,* 'to unite' (DTT 40); Syr. /'ḫ(w)/ Etpa., 'to become brothers'; **ESA:** Sab. *'ḫw,* 'to be allied'; **Ar.** *'aḫā(w),* to 'become a brother'; **Eth.:** Ge. ta'aḫawa, to be a brother'.

Cf. Murtonen 1989:87.

3 - Homographs/Loanwords

Heb. *'āḫ,* 'brazier', < LW; cf. Eg. *ᶜḫ***,** 'brazier' (CDME 48); cf. Murtonen 1989: 87.

/'aḪ/

1 - First level: a) simple base

*/'aḪ/ Exclamative primary functor NWS. **BS:** 'expectoration' / exclamation usually of constraint > 'shortness of breath', 'cough', not attested at the first simple level, but cf. Ar. *'aḫḫan,* 'aha!' (DAF 15).

Of onomatopoeic origin, possibly. - **AA:** Eg. *iḫ***,** 'ah!', interj. expressing relief (CDME 28). - **SF:** Deixis, supraseg. expressionism.

/'ə:aH̱-/ Second level onomatopoeic nomin. deriv. with possible vocal. intensification < /'aḫ/ < /'āḫ/ < /'ōḫ/: **Heb.** *'ōḫ*, 'howling desert animal' < by onomatopoeic imitation of the animal cry.

But an **AA** origin is also possible; cf. Eg. *ᶜḫ*, 'bird' (GHÄD 158).

1 - First level: b) intensified base

/'aH̱a/ Denom. predic. by conson. intens./gemin. < /'ə:aḫ/ > /'aḫ(a)ḫa/**,** SW/SS. **BS:** 'to bring out the /'aḫ/ sound': **Ar.** *'aḫaḫa*, 'faire ahha! aha!' ('comme fait celui qui tousse'; DAF 15); Tig. *'aḫuᶜ belä*, 'to cough'; Gur./Har. *uḫu' barä*, 'to cough'.

A suffix. /-l/ expansion of this exclamatory functor may be Ug. *'aḫl*, 'if only!'; Heb. *'aḫᵃlê*, 'oh!, if only!'. Also Ar. *'anaḫa*, 'to breath hard, to made a reiterated hemming in one's throat', *'unūḫ*, 'a sound accompanied by ...'. No other expansion can be ascertained for the whole group of the exclamatory functors /'ah/, /'aḥ /, /'aḫ/.

2 - Homographs/Loanwords

Heb. *'āḫû*, 'sedge, marsh plant', by meton. expansion > 'reed-bed', with regressive vocal. assimilation (cf. Eg.); EpAram. *'ḫw(h)*, 'grass, vegetation'; LW, cf. **AA:** Eg. *jḫw*, 'leafy tree' (GHÄD 96). It is necessary to distinguish this base/seme from /'aḫ-/, 'brother/side'.
Tig. *'aḥā*, Tigñ. *'aḥḥā*, 'cows' < Eg. *íḫ(.t),* 'bull/cow' (CDME 28; cf. Essai 78)*.*

/'vK-/

1 - First level: a) simple base

/'vK-/ Interrog. functor WS. **BS:** 'expression of a subjective state of ignorance, bewilderment', syntagm related to exclam. deixis   /'ay>e+k+y:h/ (?): **Ug.** *'ik*, 'how?', 'why?', *'iky*, 'what about?, how?, why?'; **Heb.** *'êk, 'êkā*, 'how?'; **NWS:** EpAram. *'yk, 'ykh,* 'how?', by syntactical transformation > affirm. conj. 'as ...'; cf. the allomorph or alternation [/'(y):h:w/] Heb. *hêk,* 'how?'; **Aram.:** EpAram. *hyk*, 'according to'; JAram.: JBAram *hêkê*, 'how'; **Ar.** *wayk(a) < way*, 'ah!', interj. of admiration (DAF 1619), with allomorph. *wayb, wayl, ways, wayh*. Also **Heb.** *'ak*, 'yea, surely'; **Ug.** *uk* (?) , 'yes, certainly, for certain' <? contrastive allomorph of *'ik* or new syntag. formation /u+k/); more probably, allomorphs based on the emph.-affirm. functor (/k/); cf. also Tig. *ake*, 'really'; Tigñ. *akka*, 'cetainly, indeed'.

Universal semantic; cf. Monoconsonantal, 50, 55f. [/':h:k/]. The initial vowel results either from contraction or from prosthesis. **SF:** Psychophysic expressionism.

1 - First level: b) intensified base

/'aK-/ Deriv. nomin./predic. by conson. intens. <? /'ak-/ > /'akka/, WS. **BS:** '(to show) bad mood', by cause/effect meton.: **JAram.:** *'aktānā' (< /'kt/)*, 'venomous, vindictive' (DTT 66); Syr., *'akketā*, 'anger', *'akkᵉtānā***,** 'angry'; **Ar.** *'akkatu*, 'bad temper' > 'anger' > 'heat', by metaph. transformation: Ar. *'akka*, 'to be hot and without wind' (day). Allomorph. by deriv. vowel. intens./glide (?): Ar. *'awkatu*, 'anger' (DAF 69), but in this case a < /'-w-k/ cannot be ruled out (DRS 13).

2 - Second level: expanded base

/**ʾaKaYa**/ Denom. nom./predic. expan. /-ya/ <? /ʾak-/ > /ʾak(a)+ya/, SS. **BS:** 'to feel a bad mood, to show it': **Eth.:** Ge. *ʾākay*, 'bad mood', >? *ʾākuy* 'mauvais'; Amh. *ākäy*, 'bad', and possibly *akati*, 'worthless, ugly'; by objective and subjective consequence meton.: Tig. *ʾaka*, 'to be bad'; Tigñ. *ʾakäyä*, 'to be(come) bad'; Amh. *akkäya*, 'to be evil'.

Akk. *i:ekû(m)*, 'to starve, deprive (of food)', 'impoverished, bereaved', could be related either to this binary base or to the triconson. one /ʾakaya/, from which the whole group would derive. But the allomorphism /ʾakka/ // /ʾakaya/, 'bad mood', in WS and SS, favours the common base /ʾak-/.
No other either prefix., infix. or suffix. expan. of this cluster is certain. Even the derivation of the intens. and expan. bases < the CS functor /ʾak/, /ʾe(y)k/ is by no means clear (cf. DRS 18). In this regard it would be too risky to take Amh. *akš*, 's.th. disgusting, e.g. spittle, vomit, faeces', as an expan. /-š(a)/ suffix. of /ʾak/.

d) Homographs/Loanwords

Some conson. homographs show no relationship whatever to the proposed /ʾvK-/ and must be explained otherwise (cf. the related roots /kʾy/, /kwy/, kʾ:h/; DRS 18). Of these, the following may be quoted: Akk. *akkû*, 'Eule' (AHw 29), possibly of onomatop. origin; other Akk. lexemes such as *akayû*, 'object of wood, (donkey) stick', *ukû*, 'a part of the loom', *ī/ēku*, 'field (a measure)', *akû*, 'anchor', may be LW; also *akîtu*, 'New Year festival', as its possible connexion with Akk. *i:ekû(m)*, as a feast of 'degradation', is not apparent; Ar. *ʾikâ'*, *ʾakyu*, 'caution, guarantee', possibly also a LW; Tig. *ʾawwäkä*, 'to feed', and Amh. *ahun*, Har. *aḥḥa'*, 'maintenance', *ʾəh ʾaššänä*, apparently < Cush. *ak* (cf. DRS 18); Tig. *ʾuk belä*, 'to drive animals', may be of onomatopoeic origin.

/**ʾaL-**/

1 - First level : a) simple base

/**ʾaL**/ **PrimW** by conson. intens. < /ʾal/ > /ʾall/, CS. **BS:** 'expression of impotence, moral pain': **Akk.** *allu(m)*, 'malheur!'; **Heb.** *ʾalelay*, 'woe!', with double expan.; cf. **NWS***:* EpAram. *yllh*, 'lamentation', with 'Anlaut' alternation /ʾ:yl/; **Eth.:** Ge. *ʾallē la-*, 'woe to!'; Tig. *ʾalla*, 'ah!'.

Of onomatopoeic origin, related to /yll/ and /hll/ < {laryng./velar + later.} resonance (cf. DRS 20-21). Cf. /ʾalaw-/ b) *infra*. Cf. Zaborski 1971:54, who quotes two presumed Heb. allographs/expansions: /y-ʾ-l/ N, 'to act foolishly'; *ewīl*, 'fool'; both apparently alternative byforms of /ʾwl/ (cf. HALOT 21, 381), but I prefer to see them as semantically derived forms < /ʾal-/ (cf. *infra*), not from an original root /ʾwl/. Possible contamination of meaning. Amh. *alä*, Tigñ. *älä*, 'to say', could be related (?) to /aḻ/ c) as an exclamative deixis (cf. also. /aḻ-/ b)) - **SF:** Psychophysical expression.

/**ʾəL-**/ **PrimW**, CS (except SS). **BS:** 'impersonal and personified cosmic, supreme power' / 'the powerful, the first' > 'god': **Akk.** *ilum*, *elum*, 'god, deity'; **Amor.** *ʾil(l)um*, 'god'; **Ug.** *ʾil*, 'god'; **NWS:** Phoen.-Pun., EpAram. *ʾl*, 'god'; **Heb.** *ʾēl*, 'god', 'power'; **Aram.**: JAram. *ʾēl*, 'god'; **ENA:** Tham. *ʾl*, 'god' (DRS 19); with vocal. alternation: **Ug.** *ʾul*, 'military force': **NWS:** Palm. *ʾl'*, 'army corps'[?]; **Heb.** *ʾul*, 'power', *ʾûl*, 'body, belly'. Cf. *infra* the expan. /ʾalah-/.

Cf. Murtonen 1989:90. A secondary deriv. allomorph noun by vocal. intens./epenth.-glide /-y-/ of this lexeme may be seen in Heb. *ᵉyāl*, 'strength', *'ayl*, 'mighty tree, pillar of an archway'; Syr. *'iyālā*, 'help'; cf. *infra* for a possible relationship to /'al-/ < /'a-wa-l-/. On Heb. *'ēl*, 'power' (cf. Bauer 1973:26, 29: 'ma force, ma force, tu m'as abandonné'. But cf. Watson 1977:213-215, who reads the Hebrew expression *yš l'l yd-* as *yš l' lyd-*; on /l'/, 'power', cf. DUL 486). In Aram. *'ûlmā'*, 'strength, strong side' (DTT 26) there is an affix. /m-/ expansion of /'əl-/. However, Palm. *'l'*, '(army-)corps', *'ala'*, seems to be a Gr.-Lat. LW (DNWSI 57). - **SF:** View of the cosmos > religion, society.

1 - First level: b) intensified base

/**'aL**-/ a) Nominal deriv. by conson. intens. < /'əl-/ > /'al(a)l-/, WS. **BS:** 'instrument /manifestation of power', with mythol. connotation (lightning): **Heb.** *'allāh*, 'tree' (cf. /'allān-/ *infra*); **Aram.:** JAram. *'allā'*, 'club, bat' (DTT 66), *al(l)îtā'*, 'fig-tree', and as kindling wood (DTT 70; cf. Murtonen 1989:91); **ENA:** Lih. *'l*, 'to drive in a lance' (DRS 21); **Ar.** *'allatu*, 'small lance, javelin'; allomorph. by vowel intens. Ar. *'ālatu*, 'instrument in general (to eat: small lance)' (cf. DRS 12, 21). Also in the sense of something which makes strong, secures the house, door …: **Ug.** *'alt*, 'support, pillar'; **NWS:** Aram. *'allātā'*, 'post, pole, door-post' (DTT 73).

Cf. **AA:** *'al/'ul, 'stick' (HSED 8). In DRS 12, 17, 21 there seems to be a confusion: the same base is listed under different 'roots' with no cross-references.

/**'aL**-/ b) Deriv. predic. by conson. intens. < /'əl-/ > /'all-/ > /'al(a)la/, SWS. **BS:** 'manifest himself powerful': MHeb./Aram.: *'ālal*, 'to be strong' > 'to circle' > 'to spy' (DTT 71); **Ar.** *'alla*, 'briller, étinceler' > 'se hâter, s'agiter' ('like a thunderbolt': light and power as primary cosmic forces) (?). By meton. enant. deverb. noun: Ar. *'ill*, 'enemity' (?), better than < /'al(a)la/ a) (cf. DRS 21); >? Tigñ. *'alala*, 'to roast' (?) (Essai 82).

The seme 'shine, flame' has **AA** parallels (Essai 82).

/**'aL**-/ c) Deriv. predic. by conson. intens.-gemin. < /'al-/ > /'al(a)la/, W/SS. **BS:** 'to manifest moral pain' > 'to cry, lament': **Akk.** *allû*, *alla/i*, 'woe', also *alālu*, 'work song', by enant. Gt. 'to sing a joyful song'; **Heb.** /'ll/ > *'allay*, 'woe'; **Aram.:** JAram. *ᵉlêl*, 'to lament' (DTT 69: < *yᵉlêl*); **ESA:** Saf. *'ll*, 'to groan' (DRS 20); **Ar.** *'alla*, 'to cry'. By meton. subjective deriv.: a) predic. > 'to feel oneself impotent': Ar. *'alla*, 'to abandon pursuit of the prey', 'to languish, become weak (the prey bird)' (?), stative *'alila*, 'to be stinking (tooth, milk)' (DAF 44); b) noun. >: **Akk.** *ulālu(m)*, 'weak'; **Heb.** *ᵉlîl*, 'insignificant, vain' > 'idol'; **Aram.:** Syr. *'ālīlā*, 'weak, light, vain' (LS 20); Mand. *alalta*, 'feebleness' (MD 19).

Cf. Murtonen 1989:90.

/**'aL**-/ a) Deriv. nomin. and denom. predic. by vocal. intens./epenth./glide /-w-/ < /'əl-/ > /'āl-/ > /'a+w(a)+la/, SW/SS. **BS:** 'first moment of the day': Ar. *'ālu-*, 'first part of the day', 'vapour that rises mornings and evenings'; >? **Ethp.:** Ge. *'awl*, 'vapour, mist'; > Tgr. *'olä*, 'to become moist'; Tigñ. *'awli*, 'dew'; Amh., Tigñ. *awlo näfas*, 'storm'. Cf. /'awala/.

/'aL-/ b) Deriv. predic. by vocal. intens./-glide /-w-/ < /'əl-/ > /'āla/, WS. **BS:** 'to come back to the first': **ESA:** *t'wl*, 'to return, bring back', by seman. shift < 'to begin anew'; **Ar.** *'āla*, 'to return, to resort, to bear a relationship as a member to a head'. An allomorph. of this from could be seen in Heb. /w'l/, hiph. *hô'îl*, 'to make a beginning, to be keen on something, to decide ...'. Cf. /'awala/ *infra*.

A denom. deriv. from 'al a) is not to be ruled out.

/'aL-/ c) Deriv. nomin. by vocal. intens./epenth.-glide /-y-/ < /'əl-/ > /'ē:āl-/ > /'a+y(a)+l-/, CS. **BS:** 'male small cattle animal': **Akk.** *ālu(m)*, 'ram', *īlu(m)*, *illu(m)* ('leather bag' could be a metoym deriv. by altern. intens.; but HSED 20 suggest an AA origin rather weak), ayyalu(m), 'stag, deer' (cf. the secondary prefix. expan. *nayyalu(m) > nālu(m)*, 'toe, deer' (?)); **Ebl.** /a-a-lum/, /a-lu-um/, /à-lum/, 'stag' (VE 293); **Ug.** *'il*, 'ram'; **Heb.** *'ayl*, 'ram'; by epent.-glide and intens.: **Akk.** *ayyalu(m)*, 'stag, deer'; **Ug.** *'yl(t)*, 'deer'; **NWS:** Pun., EpHeb., EpAram. *'yl(')*, 'ram, deer, stag'; **Heb:** *'ayyāl*, 'fallow deer'; **Aram.:** JPAram. *'yylh*, 'hind; first ray (of dawn)'; Syr. *'aylā*, 'deer'; Mand. *aila*, 'deer'; **ESA:** *'yl*, 'mountain goat'; **Ar.:** *'a:i:uyyalu*, 'mountain-goat'; **Eth.:** Ge. *hayal*, 'ibex, mountain goat'; Tgrñ. *ḥayäl*, 'deer', 'large antelope'; > Amh. *ḫayäl*, 'large antelope'.

The deriv. must be pre-Semitic; cf. **AA** **'ayal-*, 'deer, ibex' (HSED 19; Murtonen 1989:89); Eg. *ijr*, seems a LW < Semitic. Akk., Ug. and Heb. make its relationship to /'əl-/ almost certain (< 'powerful, sexually potent', 'the first' [?]). Possible primitive totemic connotations.

2 - Second level: expanded base

Among the expansions of this cluster the following can be suggested as very probable:

/'aWaL-/ Nomin. deriv. by epenth. /-w-/ < /'əl-/ < /'a+wa+l-/, E/WS. **BS:** 'the most prominent in power', 'the first': **Akk.** *awīlum*, 'man', and allophones *amī:ēlum*; **Ug.** *awl*, 'priority, supremacy'(?) (DUL 131; cf. Dietrich/Loretz 2000:91f.); **Ar.** *'awwalu*, 'first' (AEL 3048 < /w'l/ (?), but cf. DAF 69f.). Cf. *supra* /'al-/ a) and b).

Cf. Zaborski 1971:54, who quotes two presumed Heb. allographs/expansions: /y-'-l/ N, 'to act foolishly': *'ewīl*, 'fool', both apparently alternative byforms of /'wl/ (cf. HALOT 21, 381). But I prefer to see them as semantically derived forms from < /'əl/, not from an original root /'wl/. In antiquity a 'fool' was considered a 'divine' and 'powerful' entity.
For Akk. this seems a better etymology than < /'nm/ (cf. DRS 12). This deriv. has to be considered a real epenthesis, not a simple vocal. intensification. Also Heb./JAram. *'êlām/ûlām(')*, 'porch, entrance', 'in front of' (DTT 26), possibly a secondary /-m/ expan. suffix. of this expanded base (Murtonen 1989:85).

/'aLān-/ Nominal deriv. by conson. intens. and suffix. extens /-an/ < /'əl-/ // /'al(a)l-/ > /'allānu/, E/WS. **BS:** 'something strong of aspect': **Akk.** *allānu*, 'great, powerful tree: 'oak', *alianu(m)*, *alânu(m)*, *alilānu(m)*, a tree; **Eb.** *al₆-la-na*, 'oak' (MEE 10:90); **Ug.** *'aln*, 'oak grove'; **Heb.** *'allôn*, 'any big tree', with multiple allomorphs: *'ayil, 'ēlāh, 'ellāh, 'ēllôn*, which certify the simple base; **Aram.:** JP/BAram., Syr. *'îlān(ā')*, 'tree'.

Cf. **AA:** *'alan-, *'alun-, 'tree' (HSED 9); Eg. *ínrn (ílln)* // *'al-l²-lú-na* LW (WäS 1 98; Helck 1971:507). It may be a pre-proto-Semitic triconson. PrimW with possible totemic connotations. However, Heb. *'alā*, 'stick', does not exist (HSED 8; cf. Diakonoff/Kogan 1996:27).

/**'əLaN-**/ Nomin. deriv. by suff. expan. /-n/ < /'əl-/ > /'i:ul-/ > /'əlān-/, WS. **BS:** 'supreme power, god': **Ug.** *iln*, 'deity, god'; **NWS:** Phoen.-Pun. *'ln*, pl. *'lnm*, *alonim*, 'god'.

/**'aLaW:Y-**/ a) Denom. predic. expan. /-w:y-/ < /'əl-/ > /'al(a)+w:ya/, W/SS. **BS.:** 'to show/exert power': **Heb.** *'ālāh*, 'to put s.o. under an oath, curse', *'ālāh*, 'curse'; (magic as the greatest divine power); **ESA:** Sab. *'lh*, 'curse'; **Ar.** *'alā*, 'to be able to', 'to give' / IV 'to swear' (cf. Murtonen 1989:91). By enant. and in the ambivalent field of curse (< 'to be under another's power, cursed'): **Heb.** */'ālāh/ > *yō'el*, 'to fall short'; **Ar.** *'alā*, 'to fall short of' (it is not necessary then to postulate a specific AA etymon *'Vl-, 'to be exhausted': HSED 37). By metonym. concomitance: 'consequence of a curse/oath': **NWS:** Phoen. *'lh/t*, 'covenant' (expression of power as 'present' and 'curse'); allomorph. with vocal. glide: Phoen.? *'ylt*, 'covenant'; by enant. Tig. *'ala*, 'fault, weak point, danger spot' (which manifests impotence)'.

The same enant. can be seen in /l''/, /l'y/, with the same semantic value, possibly by metathesis/resonance. Or are we dealing here with an intrinsically ambiguous seme? Also Akk. *e'ēlu*, 'to bind', *i'lu(m)*, 'contract, bond', should be taken into account in this connexion. But this is probably another (allophone?, /y-/ expan.?) base (/y'l/) (cf. AHw 189). On the other hand, an **AA** etymon *'il, 'swear, oath' (HSED 26), of Sem. /'ly:h/ is very dubious.

/**'aLaY-**/ b) Denom. predic. expan. /-w:y-/ < /'al-/ > /'al(a)+ya/, WS. **BS.:** 'to utter an /'al/ cry': **Heb.** *'ālāh*, 'to wail': **Aram.:** JAram. *'ly*, *'ălā'*, 'to lament, wail' (DTT 68): Syr. *'elā*, 'to cry, lament' (cf. Mand *alia*, 'whither to go!'); > ? Ar. *mi'lātu*, 'piece of rag which a woman holds in wailing'.

Cf. the possible alternation/allomorph of /'ll/ (< /(y)ll/), 'to cry, lament'; cf. *supra*.

/**'əLaH-**/ Deriv. nomin. by expan. /-h/ < /'əl-/ > /'i:ul-/ > /'alah-/, W/SS. **BS:** 'supreme power, god': **Ug.** *'lh(m)*, 'the divine one': **NWS:** 'god' = EpHeb., EpAram., Palm., Nab., Hatr. *'lh*; **Heb.** *ᵉlōᵃḥ(îm)*; **Aram.:** BAram. *ᵉlāh*; JAram. *'ĕlāh*; JBAram. *'ălāhā'*; Syr. *'alāhā*; Mand. *alaha*; **ESA:** *'lh*; **Ar.** *'ilāhu*, with allomorph by conson. intens. *'allāhu*, as DN; > **Eth.:** Tig. *ilahi*, 'Lord God' (< Heb.); Gur. *allah*, *alla* (< Ar.), 'God'.

Cf. Murtonen 1989:91. For an overall, up-to-date discussion of this expansion cf. Pardee 2000:35ff.

Other more uncertain expansions of the onomatop. binary cluster /'al/ could be: CS /š'l/, BS: 'to make one's own cry heard' > 'to exclaim' (Cat. *cridar*, 'to call'), according to the causative force of the morpheme /š-/: 'to ask' = Akk. *šālum*, *ša'ālum*; Ebl. /sa-il-tum/, /sì-a-lu/; Ug. *š'l*; NWS: Pun., EpHeb., EpAram., Nab. *š'l*; Heb. *šā'al*; Aram.: JP/BAram. /š'l/; Syr. *šē'l*; ESA: Sab. *š'l*; Ar. *sa'ala*; Eth.: Ge. *sa'ala*; Tig. *tĕsä'ala*; Gur. *täsalä*; but Amh. *täsalä*, to make a vow' < *sǝlät*, 'vow' (Murtonen 1989:407); especially in the semantic field of invoking the dead and soothsaying, whence *šᵉ'ôl*, 'wasteland', 'underworld' (cf. HALOT 1368-1370; for this Heb. lexeme Murtonen 1989:407 suggests the root /š'V/, which seems rather unlikely).
More uncertain is Heb. /'lm/, 'dumb', according the enant. indicated above; also as an infix. expansion /'ml/ > /'al/: Heb. *'umlal*, 'to dry out, dwindle', Phoen. *'ml*, 'wither' (cf. Murtonen 1989:93) – It is also difficult to

determine the relationship of this cluster to Eth.: Ge. *hallawa*, 'to be', Tig. *halla*, Tigñ. *'allo*, Amh. *allä*, Gur. *alä* (cf. CDG 218; Diakonoff/Kogan 1996:27), according to its basic seme ('first affirmation of power...') recorded above; possibly an AA origin is to be presumed: Eg. *írí*, 'to create', Ber. *el*, *ili*, 'to be' (cf. Essai 80). This applies especially if one takes into account the absence in this area of the base /'əl-/, 'impersonal and personified cosmic, supreme power, the first' / 'the powerful, the first' > 'god'. This original perception of existence as an assessment of priority and power is possibly to be found in **AA** **'al-/*'il-*, 'to be' (HSED 8).

3 - Homographs/Loanwords

The CS functorial values and their morphological expan. (pron., conj., adv.: negative, affirmative) are more the result of the prosthetic conj. < /'+l/; also Heb. /'u-lay/, 'possibly', and Akk. *u-la-* (id.)], *ul*, 'not'/'or' (Monoconsonantal:49ff.), than due to derivation from an original cluster < /'-l/.

Among the many homographs the following may be quoted:
Akk., *âlu(m)*, 'village, town, Ar., *'ālu-*, 'family, relations' > *'ahl*.
Akk. *elūnum, elūlu(m), ulūlu*, 'month name' > Heb., JAram. *'ĕlûl*, Nab. *'lwl*, Ar. *'aylūl* (cf. Murtonen 1989:90; for a bibliography cf. DRS 21) < Sum. LW possibly, but a Sem. etymology is not to be ruled out.//
Akk. *alallum, elallum*, 'a stone' < LW?
Akk. *allallu*, 'a kind of bird' < LW?
Akk. *īlu, illu*, 'reed bundle' < LW?
Akk. *illatu(m), illitu(m), allatu/m)*, 'band, group' <? 'flock <? by conson. intensification < /'əl-/ > /'ē:āl-/ 'male small cattle animal'.
Akk. *illātu(m)*, 'saliva' <? AA **'ilaw:y*, 'saliva' (HSED 27); possibly related by metonymy to < /'al-/ > /'al(a)+w:ya/, 'to utter an /'al/ cry'.
Ug. *'all*, 'garment' > Hurr. LW?, cf. Akk. *allānu*, 'a garment'.
Heb. *ᵉwîl, ᵉwīlî, 'iwwellet*, 'fool'; Meh. *ḥaywel*, 'mad'; Soq. *halhal*, 'idiot'; the semantic enant. deriv. or possibly the semantic shift > as a 'divinely powerful person' offer better deriv. pattern than the etymology < 'strong, fat' > 'stupid' usually suggested (cf. DRS 12; HALOT 21; Murtonen 1989:85) cf. *supra* /'awal-/.
Ar. *'uwālu*, 'shark' (cf. SDA 45: 'indien').
Ar. *'allatu*, 'flock grazing in far away pastures' (DAF 44) < in relation to /'ayl/, 'ram', and its allophones, 'powerful' flock? On the other hand, the relationship of this cluster /'-l/ to /'ly-/ > *'alyatu*, 'animal body part', 'buttock, fat tail, …' (Heb., Aram., Syr., Ar.; Akk. *ellu(m)*; cf. HSED 8) it is not clear: It may be either a PrimW or an original metaph. (fat > 'the most succulent, best') (cf. DRS 20; Murtonen 1989:91); but cf. also Heb. *ᵉlāl*, 'soft' > 'fatty substance' (DTT 71), related to /'al̲-/ c) with the derived meaning 'weak'.

/'əM-/

1 - First level: a) simple base

/'əM-/ **PrimW** with spontaneous conson. intens./gemin. (cf. Heb. *'abbôt*), CS. **BS:** 'first female procreative and social principle': **Akk.** *ummum*, 'mother'; **Ebl.** /'ummu/, 'mother' (VE 1044); **Amor.** /'i:ummum/, 'mother'; **Ug.** *'um*, pl. *umht* 'mother'; **NWS:** Phoen.-Pun., EpHeb., EpAram., Palm., Hatr. *'m*, 'mother'; **Heb.:** *'ēm*, 'mother'; **Aram.:** JA *'m, hm*; JPAram. *'m, 'emmāh*, pl. *'mhn*; JP/BAram. *'îmmā'*, pl. *'îmmāhātā'*; Syr. *'emā*, pl. *'emhē*, 'mother'; NAram. *yimā*, 'mother'; **Ar.:** *'ummu*, 'mother'; **ENA:** Saf. *'m* (DRS 22; Lih. *'umm*, 'mother' (DRS 22); **ESA:** Sab. *'m*, pl. *'mht*, 'mother'; **MSA:** Mh. *'ɛm, hāmē/ḥāmēt*, 'mother'; Jibb. *'ɛmɛ/'ɛmɛtə*, 'mother'; **Eth.:** Ge. *'əmm*,

'mother'; Tig. *ʾəm*, 'mother'; Tigñ. *ʾəm(-bet)*, 'mistress of the house'; Amh. *ʾəm-*, in compounds, *ənnat*, 'mother'; Gur. *əmm*, 'mother').

Cf. Murtonen 1989:92. PrimW of onomatopoeic origin: [{'attak'} + labial /m/] (cf. DRS 2) in many Semitic and other languages, like /ʾab(b)-/, 'mother', with many derivations from the basic meaning: 'people, nation' // 'conduct, canon, nature', 'master, way', 'protoplasm'; and modern. (Ar.) 'the mother of …(e.g. of wine)', cf. already Akk. *ummu ṭuppim*, 'original document'?. - **AA:** the distribution **ʾ**am-/**ʾ**um-, 'woman'/'people', suggested in HSED 10/34 seems inadequate. - **Nostratic:** *ʾam(m)/ʾəm(m)* (NM 571f.). - **BS:** Family (biological and social order).

/**ʾaM-**/ 1) **PrimW** contrast. apophony + fem. marker of /ʾəm-/, CS. **BS:** 'secondary /subordinate female family component in service and procreation': **Akk.** *amtum*, 'maid, female slave'; **Ug.** *ʾmt*, pl. *ʾmht* '(female-)slave, maidservant'; **NWS:** Phoen., EpHeb., EpAram. *ʾmt*, 'slave-girl, servant'; **Heb.** *ʾāmāh*, pl. *ʾămāhôt*, 'slave'; **Aram:** JAram. *ʾamhāʾ ʾamtāʾ*, pl. *ʾamhᵃtāʾ*, 'hand-maid' (DTT 75); JPAram. *ʾamhāh*, 'maidservant'; JBAram., Syr. *ʾamtāʾ*, pl. *ʾamhatāʾ*, 'maidservant; Mand. *amta*, *amuta*, l. *amhata*, 'maid-servant'; **ENA:** Tham. *ʾmt*, *ʾmwt* (pl.) (DRS 22); **Ar.** *ʾamatu*, pl. *ʾamawāt* and others, 'a female slave': **Eth.:** Ge. *ʾamat*, pl. *ʾaʾəmāt*, 'maid'; Tig. *ʾamät*, 'handmaid'; Amh. *amät*, 'female slave'.

Cf. Murtonen 1989:92. Possibly the base was originally expansive: /ʾəm-+h-/ [> /ʾamah-at-/ > /ʾamat-/, with ellipsis of intervocalic /-h-/ and vocalic assimilation, as can be ascertained from the pl. forms. In Ar. it is subsumed under /ʾmw/ (cf. AEL 103). – **AA:** *ʾam-, 'woman', Eg. *mwt* (Essai 83; HSED 10), in her various functions, including that of 'mother' /ʾəm-/ (!); but cf. also Eg. (*ḥm)*, *ḥmt*, 'woman' (Essai 84). – **BS:** Family (social order).

/**ʾaM-**/ 2) **PrimW**, contrast., independent from the former, by conson. intens.-gemin. + fem. marker, CS. **BS:** body part, 'forearm, elbow': Akk. *ammatu(m)*, 'forearm, cubit' > as linear measure; **Ug.** *ʾamt*, 'elbow, ell'; **NWS:** EpHeb., EpAram., Palm., Nab. *ʾmh*, 'cubit'; Heb. *ʾammāh*, 'forearm'; **Aram.:** JA, JPAram. *ʾmh*, *ʾmth*, 'cubit'; JBAram.*ʾamtāh*, 'cubit'; Syr. *ʾamtā*, 'cubit'; Mand. *ama*, 'forearm'; **ESA:** Sab. *ʾmt*, 'cubit'; cf. **Ar.** *ʾamtu*, 'a measure', with many semantic deriv.; **Eth.:** Ge. *ʾəmat*, 'cubit'; Tig. *ʾammät*, 'fore-arm, cubit'; Tigñ. *ʾəmmat*, 'measure of an arm's, cubit'; Amh. *əmät*, 'cubit' > by semantic shift: MHeb. *ʾammāh*, 'river-arm' > 'canal' (DTT 75); Syr. *ʾam(m)ā*, 'canal, aqueduct' (cf. Sp. 'brazo (de un río)').

Cf. Murtonen 1989:93. **AA:** *ʾam-, 'arm' (Essai 78; HSED 9). The possible relationship to /ʾə:am-/ is semantically uncertain. - **SF:** Part of the body.

*/**ʾaM-**/ 3) Onomatopoeic expression of breathlessness in deriv. predic. form by vocal. intens. SS. **BS:** 'to utter this sound: **Ar.** *ʾāma*, 'to gasp for breath from thirst' (DAF 71); >? Tig. *ʾam bälä*, 'to moan, groan'.

1 - First level: b) intensified base

/**ʾaM-**/ Denom. predic. deriv. by intens.-gemin. < /ʾəm-/ > /ʾam(a)ma/, W/SS. **BS:** 'to be at the origin of …': **Ar.** *ʾamma*, 'to tend, to aim at …', 'to precede at the head', 'to become a mother', VIII *taʾammama*, 'to adopt as a mother'; **ENA:** Saf. *ʾm*, > 'to move towards' (DRS 23); **ESA:** *ʾmm*, 'to

be at the head of' (DRS 23), refl. *'tmm*, 'to obey, to be led' (SD 6); **Eth.:** Tig. *'ammämä*, 'to go in a direction, to resolve'; Tigñ. *ammämä*, 'to plan', 'to propose' > deverb. noun **Ar.** *'amāmu*, 'the location that is before', *'amamu*, 'nearness', 'in front of', *'imāmu*, 'a person whose example is followed'; Syr. *'amawmā*, 'form, protoplasm'; Akk. *ummum*, 'maître, chef de travaux'/ (?). Cf. *'a'tamma /'a'tamā*, 'to follow the example of' (cf. *infra* /'atamā/) (AEL 103).

/'aM-/ Denom. predic. deriv. by vocal. intens./epenth. /-w-/ < /'əm-/ > /'āma/ as a contrast. allomorph of the former: **Ar.** *'ā(w)ma*, 'to march at the head of, gouvern' (DAF 71); >? Ar. *'awwama*, 'to thicken' (DAF 71).

/'aM-/ Denom. predic. derive. by vocal. intens./epenth. /-y-/ < /'əm-/ > /'āma/ as a contrast alloph., WS. **BS:** by enant.: 'not to be a mother': **Ar.** *'āma*, 'not to have a husband' (AEL 137) >< Ar. *'aymu*, 'unmarried' (DAF 75).

2 - Second level: expanded base

There are no clear expanded forms of these bases, except for some denominative phenotypes by a suff. /-wa/:

/'aMaW-/ 1) Denom. predic. deriv. by expan. (+wa) < */'am-/ 1) > /'am(a)+wa/, WSS. **BS:** 'to become a slave': **Ar.** *'amā(w)*, 'to become a slave (a woman)'.

/'aMaW-/ 2) Deriv. predic. deriv. by expan. (+wa) < */'am-/ 3) > /'amā(w)/, NSS. **BS:** 'to utter the sound /'am/: **Ar.** *'amā*, 'to mew (of a cat), 'to utter a cry'.

This derivation may come from another independent onomatopeia. (cf. Sp. 'miau').

The origin of /lə'm-/ as a prefix. /l-/ of /'əm/ (> Ar. *'ummāh*) is uncertain: Akk. *li'mu*, 'family, tribe'; Ug. *lim*, 'eponym', 'people, clan'; **NWS:** EpAram. *l'm*, 'eponym-year'; Heb. *lĕ'ôm*, 'nation' (but cf. Murtonen 1989:242f.).
Following the reasoning of Murtonen 1989:269 ('reference apparently to the noises …'), /n'm/ (Heb., Ar.) could be taken as a prefix. /n-/ expan. of */'am-/ 3), with /nhm/ as an allophone. From this same onomatop. base CS /r'm/, a wild animal, could also derive, connoting the snuffling of the animal (?) (cf. Murtonen 1989:391: 'a wandering word of unknown origin').
Also CS /t'm/, 'twin' (Akk., Heb., Aram., Syr., Ar.; cf. Murtonen 1989:440), may well be a prefix. /t-/ expansion of the base /'əm-/, 'mother', by a metonym. semantic shift (cf. Hurvitz 1913:102, who presupposes a verbal root /'am/, 'to agree').

3 - Homographs/Loanwords

There are many consonantal homographs which cannot be connected with this cluster, including:
CS functor *'am*, *':him*, by prosthesis of /'+m/ (cf. Monoconsonantal 55, 59f.).
Akk. *amu(m)*, 'raft' < *hamu(m)*.
Akk. *amû*, a spiny plant < (?).
Akk. *amû*, 'palate' < Sum.
Akk. *amūtu(m)*, 'liver of a sacrificial sheep' < (?).
Akk. *amūtu(m)*, 'meteoric iron' < (?).

Akk. *ummu(m)*, ‘heat, fever’ < *emēmu* < /ḥmm/.

Akk. *ummu*, a bird < (?)

Heb. *’êmāh*, ‘fright’; JAram. *’êmtā’*, ‘fear’ (DTT 51) < /hmh/. (cf. Murtonen 1989:89).

Syr. *’amawtā*, ‘wall lizard’. (<?); cf. Ar. *’aymu*, ‘serpent’ (DAF 75).

Ar. *’āmmatu*, ‘a wound’ >< *’amma*, ‘to inflict such a wound’ (<? /am-/ 2), cf. Sp. ‘codazo’); ><[?] Ar. *’āmatu*, ‘vice, default’ (DAE 75).

Ar. *’iyām*, ‘smoke’ (DAF 75) (<[?]).

Ge. /’ym/, *’ema*, *‘ema*, ‘to make a hedge for a pen’ < (?).

Tig. *’aym*, ‘fallow ground’ < (?).

Tig., Tigñ. *’om*, ‘tree, fruit tree’ < LW[?]

*/’aN-/

1 - First level: a) simple base / b) intensified base

*/’a:əN-/ 1) **PrimW** nom./predic. with various alternative intens./expan. [/’anaya/, /’anna/, /’āna/], WS. **BS:** ‘expression of physical pain’, ‘to groan’, of onomatopoeic origin: **Ug.** *un*, ‘grief, misfortune’ > *’any*, ‘to sigh, groan’ > *t’a:unt*, ‘whispering, groaning’, and possibly *iyn*, ‘mourning sacrifice’[?]; **Heb.** *’awen/’ôn*, ‘disaster’ > ‘sin’ > ‘nothingness’, by cause/effect meton., *’ānā(ya)*, ‘to lament’, *hit’ônēn*, ‘to complain’, *’ônî(m)*, ‘mourning, ta*ᵃ*niyyāh,* ‘sadness’, and possibly *te’ūnîm*, unless related to /’a:ən-/ 2); MHeb. *’ny/h* II, ‘to press, oppress’ (DTT 84), with caus./effect. value; **Aram.:** JAram. *ᵃnan*, ‘to mourn’ (DTT 86); Syr, *’wn* ‘o!’, interjection of chagrin, *’an*, ‘to cry’, *’awntā*, *’enantā*, ‘cry, shout’, by metonym. < ‘place of pain’; Nab. *’wn’*, ‘sarcophagus/part of tomb’; **ESO:** Sab. *’ny*, ‘to commit fault of omission’, by meton. cause/effect shift; Ar. *’anna*, ‘to moan’, *’annatu*, ‘moan, complaint’.

Cf. Zaborski 1971:54; Murtonen 1989:94. The onomatop. base is the utterance itself, later verbalised. The simplest original form is to be found in Ug. and Syr. HALOT 70 quotes the resonance: /’nh/, /’nn/, /’nq/. Cf. possibly also IE [{glottal + nasal/sonant}]; for a similar development cf. /’al/. - **AA:** *’an, ‘to speak’ (HSED 12: ‘related to Sem. **’Vn*- ‘moan’; Arab *’nn* and the like), but probably to be distinguished from Heb. /ᶜny/, *pace* Diakonoff/Kogan 1996:28 (cf. Orel/Stolbova 1997:213 and the response of Kogan 2002:184). - **SF:** Psycho-physic sensations / ‘primary [animal] reactions < ‘sort of cry’.

/’a:əN-/ 2) **PrimW** with vocal. intens./epenth./glide/ /’an-/ > /’ô/w)n-/, W/SS. **BS:** ‘strength, power, wealth’: **Ug.** *’an*, ‘strength’; **Heb.** *’ôn*, ‘generative /physical power’ (from which may be > *’ānāh*, ‘cause to happen’; **NWS:** EpAram. *’wn*, ‘force’[?]; **ENA:** Tham. *’n-* ‘tranquilité’, by meton. (DRS 13); > Ar. *’āna*, to be at ease’ (AEL 129) > **Eth.:** Ge. *(ta)’ayyana*, ‘to live well and comfortably’ (CDG 50). By epenth./glide development /’aw:yn/ by meton. cause-effect or enant.: < ‘effect of effort’ > **Ar.** *’awnu*, *’aynu*, ‘fatigue’.

There is possibly contamination and allomorph. contrast between the two bases in as amuch as ‘effort’ includes ‘fatigue, pain’ and ‘strength’ at the same time. This is not merely a question of ‘pronunciations’, but of variant morphological vocalisations based on semantic shifts, a normal derivative device in any language (cf. Dulière 1970:24-25). On the other hand, the existence of an **AA** *’in., ‘to flow, to be wet’ (HSED 28), as an etymon of the rather obscure Ar. /’nn/ is very debatable. - **SF:** Psycho-physical sensations, reactions.

2 – Second level: expanded base

Of the possible expansions of this cluster only the following can be singled out with a certain degree of probability:

/'aNaY-/ cf. supra /'a: ən-/ 1).

/'aNaŠ-/ 1) Denom. predicat. deriv. by caus. suffix. /-š/ < /'a:ən-/ 1) > /'ana+ša/, WS. **BS:** 'to manifest/produce physical pain': **Akk.** *enĕšu*, 'to be(come) weak'; **Ug.** *anš*, 'to languish, fall ill, to become livid'; **Heb.** /'nš /, to be sickly', *'ānûš*, 'incurable'; **Aram.:** Syr. *naš(š)*, 'weak', by apheresis and compensatory gemin.; **Eth.:** Ge. *ne'sa*, 'to be small …', by methat.; Tig. *nä'ašä*, 'to be small'; Tigñ. *nä'asä*, 'to be small'; Gur. *anäsä*, 'to be small'.

As for Ug. *anš*, 'muscle, tendon'[?], and CS /'nš/, 'man', cf. *infra* /'əš/ a). Ug. *lan*, 'power' is to be related to > /l-'-y/. Note that E/WS /š'n/, 'shoe', seems to be a Hurr. LW (cf. Murtonen 1989:295; DUL 796, Heb. /s'n/ (!)), although Is. 9:4 would support < /'a:ə-n-/ 2), as 'manifestation of (military) power'. The same could be said of Heb./Syr. /š'n/, 'be quiet, without anxiety' < 'that makes s.o. strong' (?) (cf. HALOT 1279f.; Murtonen 1989:407); Hurvitz 1913:89 suggests the root /šn/.

Heb./Syr. /m'n/, 'to refuse'/'be disgusted' (Murtonen 1989:253) could be related to /'a:ən-/ 1) as a prefix. /m-/ expan., but this is not certain.

However, CS /'mn/, 'to be firm' (HALOT 63) seems to < AA: Eg. *mn*, 'to be firm', and in any case is not related to /'-n/.

3 - Homographs/Loanwords

There are many consonan. homographs of this cluster:

First of all, the deictic lexemes of the pronominal and functorial series: CS *'an(a)*, 'I' (cf. Pronouns, pp. 104ff.; DRS 25); ES/Akk. *ana*, 'to, for'; Akk. *annûm*, 'this' and deriv.; Akk. *ina*, 'in, on'; *annânum*, 'here'; WS *'an*, 'wherever/where?'; Ar. *'annā*, 'whence?'; Aram., Syr., Ar. *'i:en(a)*, conditional functor; Akk. *anna*, 'yes, certainly', *annû*, 'look!'; Heb., Aram. *'ānnāh*, 'please'; Ar., *'an, 'anna, 'inna*, subordinating functors, Ge. *'en(-ka)*, 'so then', etc., etc. These functorial /'-n/ morphemes in the various languages (pron., adv., conj.) are to be considered of deictic origin, along the lines of the 1st person pron. /'a-na/ and according to various semantic shifts. The alternation /':hn/':hm/ proves the supposed deictic origin of the bases and of equivalent atomic constituents. In this case, the basic element is deictic /n/ + prosthetic /'/ and also encl. /-a/ (cf. Barth 1967b:96ff.). Ar. *'anā(y)*, 'to be present, near to'/'to come to its time' and deriv., may be related to some of these locative/temporal functors. Other phenotypes are related to the deictic base /'-y/ + -n (cf. *infra*; DRS 24-25).

Consonantal homographs of /'-n/ include the following:

Akk. *ana:untu(m)*, 'battle, strife' < (?).

Akk. *anatu*, a ring < (?).

Akk. *anu*, a sort of wood or tree < (?).

Akk. *anu(m)*, a metal < (?).

Akk. *anunūtu*, a plant < (?).

Akk. *inu(m)*, a musical instrument < (?).

Akk. *inû*, 'job, craft' < (?).

Akk. *unû*, 'a kind of meat' < (?): this lexical item only occurs in jB and scarcely justifies an AA etymon *'unay-, meat' (HSED 34).

Akk. *unūtu(m)*, 'tools, utensils' < (?).

Ar. *'awnu*, 'knapsack' (DRS 13).

Ar. *'awān*, 'tortoises' (DRS 13).

WS /'ny/, 'ship', possibly an Eg. LW (cf. Eg. *ini*, 'to bring, carry off', *inyt*, 'materials for handicrafts' (CDME 22f.) and a supposed *i-na-ya* according to Albright; cf. HALOT 71), although a Sem. etymology is also proposed: /'ny/ 'to hold' (cf. HALOT 70f., CDG 410) > EpAram. *m'n*, 'vessel, vase', Syr. *mānā*, 'vessel, ship', in keeping with the isosemantic chain: 'vessel, vase' > 'vessel, ship'; Ar. *inā'*, 'vessel, receptacle'; Ge. *nəwāy*, 'vessel, instrument', … wealth'; Akk. *unūtum*, 'tools, equipment'. In any case it would be a very original derivation /expansion if < /'an-/ 2) > the 'vessel/ship' as a manifestation of power/wealth. A possible **AA** origin must be taken into account: Eg. *ḥnw*, 'jar' (Essai 80; Murtonen 1989:95).

/'aP-/

1 - First level: a) simple base

*/'aP-/ **PrimW** with original conson. intens./gemin., CS. **BS.:** 'that binds and retains', 'bind', elementary instrument: as simple base only in **Akk.** *ipu(m)*, 'membrane, afterbirth', *appatu(m)* 'bridle, rein', *apāpu*, 'infiltrate' (?) (Murtonen 1989:98).

Cf. the expan. /-n/ *infra*; there is the possibility of an original triconson. /'pn/ with regressive assimilation in Akk. (?). - **SF:** Basic instrument /action.

/'əP:F-/ Onomatop. expression with conson. intens., SS. **BS:** '(sound of) blowing': **Ar.** *'uffi*, 'word expressive of vexation, … or disgust'; *'affa*, 'to say *'uffi*, by reason of ansiety'; *'uff*, 'used … on the occasion of experiencing annoyance or disgust at anything', > by metaph. deictic extension *'uffu*, *'uffatu*, 'dirt, filth' (Sp. ¡puah!); **Eth.:** Tig. *'əf belä*, 'souffler'; Tigñ. *uf belä*, 'to blow'; Amh. *'əff alä* 'to blow, blow in the fire'. Also a meton. shift possibly seen in Ar, *'iffu*, *'iffafu* (*'iffānu*), 'a time, moment, instant', in idomatic expression (*'alā 'iffini*, *fi 'iffāni*), 'comme un souffle'!, 'sur le champ, tout de suite', according to the well-known isosemantic chain in many languages.- As a parallel development of this onomatop. could be considered the concomitant effect of its emission by cause-effect metonym. shift and vocal. intens. and suff.: JAram. *'ofyā'*, 'what is blown off, foam' (DTT 31); Mand. *aupa*, 'foam, froth'; and by further metonymy (?), Tgr. *'ofã*, 'fast, hunger' (cf. DRS 13).

Of onomatop. origin. HSED 13f. (cf. also Rapallo 2000:2020) suggests an **AA** PrimW *ap-, 'mouth', but 'related to *ap-/*wap-, 'to yawn, open one's mouth'. - **SF:** Physiological (re)actions.

1 - First level: b) intensified base

/'aP-/ Denom. predic. deriv. by intens./gemin. conson. < /'ap-/ > /'ap(a)pa/, E/WS. **BS:** 'to encircle': **Akk.** *'apāpu(m)*, 'to ring, encircle' (AHw 57); **Heb.** *'āpap*, 'to encompass'.

2 - Second level: expanded base

Some dubious infix. and suff. expansions of this cluster can be singled out. Some of them may go back to triconson. bases, of which the biconson. may be a reduction. However no prefix. expansion seems to be extant.

/'P(v)R-/ Denom. predic. expan. by suff. /-r/ < /'ap-/, cf. > /'apa+ra/ 'to cover': **Akk.** *apāru(m)*, 'to cover (the head)', *aparu*, a loincloth > **Heb.** *ⁿᵃpēr*, 'band'.

Cf. *supra*.

/'vP(v)N-/ Nomin. deriv. by suff. expan. /-n/ < /'ap-/, > /'apan-/, NWS. **BS.:** 'that binds, encircles' > 'round': **Ug.** *'pn*, 'wheel'; **Heb.** *'ôpan*, 'wheel' > *'open*, '(proper) time, way' > said of time (cf. 'the wheel of time' in many languages; DRS 29); **NWS:** EpAram. *'pn*, 'fixed time'; **Aram.:** JAram. *'ôpnā'*, 'turn' (DTT 31); Syr. **'upnā*, pl. *'ûpenē*, 'wheels'; said also of the (repeated, circular) way of behaviour; cf. *supra* Ar. *'iffu, 'iffān*. (> Ar. *fannu*, 'manner'?).

The 'wheel' is not a primary instrument, so this would be a secondary deriv. KW (cf. Murtonen 1989:98f., but his division into two bases seems unnecessary). – For Cohen < 'sans doute /p-p/, with /'/ prosthetic' (DRS 29, cf. other expan.: /ḥ-p-p/, /l-p-p/); but the expan. /'pn/ does not support this deriv.

/'aPaY-/ Denom. predic. expan. /-ya) < /(ap-/ > /'apa+ya), NE/NWS. **BS:** 'to encircle' > 'to cover': **Akk.** *apû*, 'to become veiled' > *upû*, 'cloud'; **Aram.:** Syr. *'ap(p)ayē*, 'veil, curtain, binding'.

Nevertheless, the relationship to /'ap-/ is not clear (DRS 28). For JAram. *'ofyā'*, Mand. *aupa*, cf. /'əp:f-/ *supra*.

/'aPaY-/ Denom. predic. expan. /-ya/ < /'əp:f-/ > /'apa+ya/, CS. **BS:** 'to blow the fire' (?) > 'to cook, boil' [better than < 'to encircle, cover (with ashes)']: **Akk.** *epû*, 'to bake'; **Ug.** *'ap(y)*, 'to bake'; **NWS:** Phoen., EpAram.: *'py*, 'to cook, bake'; **Heb.** *'āpāh*, 'to bake'; **Aram.:** JPAram. *' py*, 'to bake'; Syr. *'epā*, 'to cook'; Mand. *apa*, 'to bake'; cf. > Ar. *mawfā, mīfā*, 'oven' (DAF 1579); > **MSA:** Soq. *mo'fe*, 'oven' (DRS 29); **Eth.:** Ge. *'epuy*, 'baked'; cf. Amh. *'əff alä*, 'to blow on the fire'.

Cf. Murtonen 1989:98. Common, primary and original conson. harmony in relation to 'fire' ('blowing'). Its possible relationship to /'ap-/, 'to encircle', is not clear; but in any case 'chasing/encircling' (< /'ap-/) preceded 'cooking' (/'əp-/), a secondary 'modern' activity, and 'oven, kiln' is instead a secondary cultural implement. Akk. and Ar. indicate different allomorphic 'roots': /'p(y)/ // /wp(y)/ (?).

/'aNP-/ PrimW, deriv. by infix. /-n-/ or nasalisation/dissimilation of the intens. base < /'əp:f-/ > /'a+n+p-/ > /'a-pp-/, CS. **BS:** 'nose': **Akk.** *appum*, 'nose'; Ebl. /'appum/ (VE 212); **Ug,** *'ap*, 'nose'; **NWS:** EpAram., Palm. *'(n)p(y)*, 'front side, face, nostrils'; **Heb.** *'ap(p)*, 'nose', *'ānap*, 'to be angry' (cf. Sp. 'hincharse las narices'); **Aram.:** BAram. *'anp*, 'face'; JPAram. *p*, 'nose'; JBAram. *'appā', 'anpā'*, 'face, front side'; Syr. *'appayā*, 'face, surface'; *'anf(ā)*, 'nose, face' (TLS 278); Mand. *anpia*, 'face, presence'; NAram *pâtâ*, 'face, front, surface', by apheresis; **ESA:** Sab. *'nf*, 'fronts, near sides' (DOSA 23); Ar. *'anfu*, 'nose' > *'anafa*, 'to strike, to reach the nose', *'anifa*, 'to suffer pain in the nose?, etc.; **Eth.:** Ge. *'anf*, 'nose'; Tig., *'an(e)f*, 'nose'; Tigñ., *'anfi*, 'to pinpoint', 'nose'; Amh. *ənnəf alä*, 'to blow one's nose'; Gur. *əf(f)/uf balä*, 'to blow'.

The relationship to onomatop. /'əp-/ and to the seme 'to blow' supposes a certain semantic shift that is not self-evident and in any case is very primitive. In this connexion, see Amh. *afenṭa*, 'nose' (< /nfṭ/, 'to blow the nose', with metath.; cf. CDG 28; cf. Eg. *fnd̠*, 'nose'), that suggests a resonance [{attack glottal/nasal} + {labial}] as original, secondarily developed into an allothetic base in Amh., or simply a mix of bases. Instead, Cohen (Essai 83; cf. also Rapallo 2000:2020) suggests the AA root /fn/ which I find less suitable, given the dissimilatory character of /n/ and the persistence of the pharyngeal/velar attack in the AA languages.

Heb./Aram. /š'p/, 'to gasp for air, to pant, to strive', may be considered a prefix. /š-/ expan. of /'əp:f-/, rather than related to the root /šwp/ (Murtonen 1989:407).

3 - Homographs/Loanwords

Among the conson. homographs of this cluster, the functors /'p/, /'pw/, /'pnk/, etc. (< /p/) must be left out of consideration (cf. Monoconsonantal, pp. 62; ChCohen 2004:*15-*16, *18-*20; but the proposed distinction of two /'ap/ is apparently more a question of function than of etymology). Here are some others which cannot be easily derived from the present bases:

Heb. *'ê(y)pāh* 'corn-measure' is a KW < Eg. *'ipt*, 'grain mesure' (CDME 16; Murtonen 1989:89).

Ar. *'āfatu*, 'blight, blast, disease'; the relationship either to /'ap-/, 'bind' or to /'əp-/, 'blow' (cf. Ar. *'uffi*, 'word expressive of vexation, … or disgust') through a metaph./meton. shift. remains unclear.

On the other hand the relationship of the root /'pl/ > /'apay-/, 'to cover' (cf. Heb. *'opel*, *ᵃpēlāh*, 'darkness', *'āpēl*, 'dark' > JAram. *ᵃpal*, *'appîl*, 'to make dark' (DTT 105)) to /'ap-/, through a form such as Akk. *upûm*, 'cloud', cannot be substantiated.

/'aQ-/

1 - First level: simple base

*/'aQ-/

A sterile cluster with no clear expansions; /n'q/, 'to groan', in Akk., Heb., JAram. and Tham., could be related to < /'nq/, /nhq/ (cf. HALOT 658; Murtonen 1989:269) as two alternative allothetic realisations (*/'-q/ // */n-q/) of a resonance [{glottal attack glottal/nasal} + {velar}]. Ar. *'aqā*, 'to displease (of food)' could provide a hint of an original biconson. base of onomatop. origin expressing disgust (?). From it, through a descriptive / denominative shift, Ar. *'anāqu*, 'small goat'(?), Heb. *'aqqô*, 'wild goat' (Akk. *inqu* does not seem to exist; Murtonenn 1989:99) could be derived (because of their bleating sound). But neither the original base nor the deriv. shift can be determined.

2 - Homographs/Loanwords

There are numerous conson. homographs of this cluster, but no common or a clear-cut biconsonantal root can be identified:

Akk. *equ*, 'to anoint' < (?)

Akk. *ēqu*, a cult object < (?).

Akk. *uqu*, 'people' < (?).

Aram. *'qy*, 'to understand'(?), cf. Eth. /ᶜwq/, 'to know, understand'.

Syr. *'ûqîtā*, 'woman's hair band' (TLS 90); cf. < Ar. *wiqāyatu* < /waqā/, 'to guard, protect'.

Ar. *'uqiyyatu*, *'awqiyatu*, 'a weight' < Greek/Lat. 'ougkia !!Greek script!! /uncia'.

Ar. *'awqu*, 'burden, misfortune' < /'āqa/, 'to hang, to draw a disgrace', possibly a denom. deriv. loan from the former.

Ar. *'uqatu*, 'narrow well for rainwater' (LAL 70);.

Ar. *'awqatu*, 'group, crowd (of men)' (LAL 70).

Ar. *'ayqu*, 'lower joint of a horse's leg' (< ?).

/'vR-/

1 - First level: a) simple base

/'a:ēR-/ **PrimW** with vocal. intens. and contrast. apoph. 'fire'/'light', CS. **BS:** 'light/to shine'//'fire'/'to burn': 1) **Akk.** *urrum*, 'daytime', 'day' (# 'night'); **Ug.** *'ar*, 'to shine'/'light'; **Heb.** *'ôr*, *'ôrāh*, 'to become light'/'daylight, light'; **Aram.:** JAram. /'wr/, p.p. *nā'ôr*, 'clear' (DTT 32); **MSA:** possibly Meh. *ḫa-rit*, 'moon'; cf. /'ər-/ *infra*. Cf. also **Eth.:** Ge. *'e:ir*, 'sun, light' >? 'time'; Gur. *ayr*, 'sun, disc of sun' (EDG 118: < Cush. or Eth. /'mr/, 'day'). 2) **Ug.** *'ur*, 'warmth, heath'; **Heb.** *'ûr*, 'firelight, fire'; **Ar.** *'iratu*, 'fire, hearth, chimney' (DAF 27), by glide:*'awāru*, 'fire glow, flame, smoke' (DAF 68), *uwār*, 'heat, blaze' (DMWA 34) > denom. (II) *'awwara*, 'to set fire (to)'; **MSA:** Jibb. *'ɛrət'*, 'moon', Soq. *'éreh*, 'moon', cf. *'érir*, 'to light' (SL 72f. for the other possible etymons).

Cf. Zaborski 1971:54.: Murtonen 1989:85. AA *'ur-, 'to burn, be hot'/'day' (HSED 35). **SF:** Natural phenom./climate: 'fire' and (><) 'light', simultaneous, meton. relationship. The relationship of Heb. *'ûrîm*, 'instrument for casting lots', to this base is very dubious (cf. HALOT 25); it is a KW (// *tummîm*) from the semantic field of magic. DRS 13 quotes the following 'resonances' /WRḪ, SHR, NWR, ḤRR/.

1 - First level: b) intensified base

/'a**R**a/ 1) Denom. predic. deriv. by conson. intens. < /'a:ər-/ > /'ar(a)ra/, CS. **BS:** 'to set on fire': **Akk.** *arru*, 'tattooed, marked' (AHw 71; = 'branded' (?)), *arrātu*, pl., 'brand mark on the hand of the temple slaves' (CDA 24, but NB); said first of the fire and by metaph. shift also of the psychological state < Akk. *arāru(m)*, 'to be convulse' (cf. *infra* Ar. *'arā(y)*, 'to inflame with anger', DAF 27; while an AA *'er-, 'tremble', supposed by HSED 21, is rather weak). As meton. effect of rage or fury (cf. Sp. 'ardor'), a very common meton. in many languages > 'curse': **Akk.** *arāru(m)*, 'to curse', *arratu(m)*, 'curse'; **NWS:** EpHeb. *'rr*, 'to curse'; **Heb.** *'ārar*, 'bind with a curse', *mᵉ'ērāh*, 'curse', *'rrh*, 'curse' (Qumranic Hebrew); **Aram.:** JAram. *'ărar*, 'to curse' (DTT 126); **MSA:** Soq. *'rr*, 'to get angry', 'to curse' (cf. SL 76); > meton. effect: Tig. *'arar*, 'presumption', cf. the synon. equivalence in various languages between 'curse' and 'disgrace'. A sexual metaph. deriv. can be seen in: **Ar.** *'arra*, '*inivit (eam)*, to compress', *mi'arru*, 'much addicted to venery', *'āra*, 'to force a woman' (DAF 68; cf. Sp. 'caliente', 'el ardor de la pasión', said of the sexual œstrum). But a denom. deriv. from PrimW. Ar. *'ayru*, 'penis' cannot be ruled out.

Cf. Zaborski 1971:54; Murtonen 1989:1000; of AA origin according to HSED 31, but if the semantic break attested in the phylum (/'to curse'/'to insult'/'to be angry'/) is taken into account, the assumed derivation is valid for the whole. Instead, Syr. *'arā*, 'imprecation', Ge. *'ar*, 'oath', seem to be related to Gr. *arā*, 'vow' (cf. CDG 36).

*/'a**R**-/ 2) An onomatop. alluring sound to call animals. NW/SS**: Ar.** *'ar 'ar, 'irra 'irra,* 'a cry to call sheep and goats'; >? JAram. *'r',* 'fowler' (DTT 113, originating from *'ādā* < Heb. *ṣōdeh,* comp. Heb. *ᶜēd, ᶜêd* (?), is implausible); **Aram.:** Syr. *'arrā,* 'bird lure' (?) (DRS 34]; **Eth.:** Tig. Tigñ *'ərara* 'scaffolding in the cornfields to drive off birds'.

2 - Second level: expanded base

/'a**R**a**Y**-/ Denom. predic. deriv. by expan. /-y:wa/ < /'a:ər-/ > /'ar(a)+y:wa/, SS. **BS:** 'to burn': **Ar.** *'arā(y),* 'to be burned', II 'to set fire (to)' (DAF 27); **Eth.:** Tig. *'arwä,* 'to flame up, blaze'.

On the other hand, a second /'ar(a)+y:wa/ denom. predic. deriv. by expan. /-y:wa/ < */'a:#r-/ > /'ar(a)+y:wa/, CS with BS, 'to keep, collect', in the SF of harvest and husbandry, is apparently a byform or allophone of /ᶜ:ġr/, 'to keep, protect' or else an AA deriv. is to be presumed (Eg. *iryt,* 'corn'; cf. Essai 60; Murtonen 1989:100): Akk. *arû,* 'granary, storehouse'; *urû(m)/urrû,* 'stable, stall' and the animals kept there; NWS: Phoen. *'ry,* 'to amass'; Heb. *'ārāh,* 'to pluck', *'urwāh,* 'stable'; Aram: JAram. *'ûry:wā',* 'pile of plucked plants, stable'; Syr. *'wr',* 'coup, soufflet' [*colaphus*]; Ar. *'iryu, ' ārīyu,* 'stable'; Eth.: Ge. *'araya,* 'to gather, glean'; Tig. *'arā,* 'to collect, heap up'; Tigñ. *'aräyä,* 'to gather'; cf. the allomorph Ge. *'arara,* 'reap, gather, harvest'; Amh. *'arrärä,* 'to reap'. Possibly, the lexeme /'rn/, 'chest, ark, sarcophagus' can be derived from this root as a /-n/ expan. (?) (cf. Murtonen 1989:101: '*Kulturwort* of unknown origin'). Cf. Zaborski 1971:54. For JAram. *'ô:ûryā'* DTT 34 suggests 'storehouse' < Lat. *horreum,* pl. *horrea,* Gr. ὤρειον, ὤριον. Is this a nostratic lexeme? In this connexion, /'ar(a)+y:wa/, 'to keep', could be a denom. predic. deriv. from this LW.
Other expansions are rather difficult to substantiate. Hypothetically, the following could be singled out from prefixed expansions:
NWS /t'r/: Ug. *tar,* 'glory' (?); Heb. *to'ar,* 'appearance, form'; Phoen.-Pun. *t'r,* 'presence, significance' (?), *bt'rm,* 'according to' (cf. Sp. 'a la luz de'), *t'rh* (Murtonen 1989:441).
Heb. /n'r/, 'to repudiate', could be considered a dialectal expanded by-form of /'rr/, 'to curse' (cf. HALOT 658; Murtonen 1989:269). In this connexion cf. also /m'r/ (Ar. *ma'ara,* 'semer des inimitiés', *ma'ira,* 'concevoir une haine contre', 'se rouvrir une plaie' [DFA 1052f., not extant in modern Ar.]; Heb. /m'r/ hif. 'painful, malignant') (Murtonen 1989:253), possibly as an /m-/ expan. < /'a:ər-/, taking into account the semantic shifts which occur in /'ar(a)ra/.
It would be more hazardous to assume the cluster /'mr/ as an infixed expansion of /'r/, although the BS 'light' > 'to manifest', 'put into light', 'to make visible', 'to make known' (HALOT 65) could easily explain the various 'dialectal' shifts: Akk. 'to see', NWS 'to say', Ar./MSA 'to order', Eth. 'to show', MSA 'matter; huge; prince' (ML 6); ESA 'sign, omen, oracle' (SD 6). In this regard Jibb. *'ōr,* 'to order', (>?) *'ɛmer,* 'matter, order' (JL 3, 5), could represent the missing link, unless this is a syncope/assimilation of 'sonants'/nasals (cf. Sanmartín 1973:263-270; Murtonen 1989:94).
Another infixed expansion of /'r/ could be Phoen. *'šr,* 'joy', possibly through a metaph. shift (cf. Sp. 'se le iluminó el rostro'); Meh. *'śr,* 'to point out, beckon' (ML 8), a parallel allomorph to the possible expansion /'mr/ already mentioned.
ESA *'hr,* 'to be inflamed, infected (tooth)' (SL 39) could also be considered as an infixed expansion of /'r/, while CS. /'rś/, 'to desire' (Akk., Ug., Heb., Aram.) is more difficult to establish as a suffixed form (cf. Murtonen 1989:102).
On the other hand, E/WS /nr/: Akk. *nūru(m),* 'light', Heb. *nēr, nîr,* 'lamp, light', Ar. *nûru,* 'light', JAram. *nûrā',* 'fire', Syr. *nûrā',* 'fire', Mand. *nura,* 'fire' and also ESA *hnr,* 'offer burnt offering', may be considered an /nr/ (?) allomorph of /'r/ (cf. the Heb. derivatives *mā'ôr/mᵉnôrāh,* 'lamp').

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3 - Homographs/Loanwords

There are several homographs of this consonantal cluster; some are LWs and others belong to different first laryngeal/pharyngeal roots or to full triliteral roots. They include:

CS: Akk. *iria*, *aria*, *e/ira*, 'side by side'; Ug. *ary*, 'fellow, friend, kin'; Ar. *'ariyyu*, place of confinement of an animal', *'arā*, 'animal kept tied to …' < Eg. *írí*, 'companion'. HSED 14 proposes a AA *'ar-, 'husband', base mainly on Cush. But a possible connexion with /'ar̠a/ 1) > 'tattooed, marked' < 'branded' (cf. *supra*), said of slaves and animals, as a way of keeping them attached or under control, is not to be ruled out. On the other hand, the claim of a Sem. etymon *'iru[']- to explain Akk. *erūtu*, *urû*, 'fish spawn', related to AA. *'ur, 'fish', is probably unnecessary (cf. Akk. *arû*, 'to become pregnant'; CDA 80).

Akk. *arūru*, 'outlet of channel', LW/KW (?) or alloph. of *ḫarārum* **(?).**

Akk. *a:erû(m)*, 'to become pregnant' < /hry/.

Akk. *a:erû*, 'to cut off' (< /'₁?rū/, cf. AHw 72)< (?).

Akk. *arû(m)*, 'result, product (math.)' < Sum. LW.

Akk. *āru(m)*, 'warrior' < *ayyaru*, 'young man' (cf. Ar. *'ayru*, 'penis').

Akk. *arû(m)*, 'to vomit' < ? of AA origin (cf. HSED 31) or preferably onomatopoeic.

Akk. *a:eru/urû*, *ḫaru*, 'branch, frond' < *ḫarû*, 'palm shoot' (<*ḫarārum* **(?))**

Akk. *arru*, 'a weapon', *arītu(m)*, 'shield' (cf. Ug. *art*) < LW (?).

Akk. *ayyaru(m)*, 'flower' < (?); cf. Heb. *'ôrāh*, 'mallow' (*Malva rotundifolia*) <? (Ug. *ur* and *art* do not exist; cf. HALOT 25; HSED 15).

Akk. *ayyāru*, month name, LW in WS (Heb., Phoen., Aram., Syr., Ar. Ge.; cf Murtonen 1989:89), possibly a intens. denomin. in origin, probably to be distiguished from the month name Akk. Nuzu/Alalakh *ḫiari*, Ug. *ḫyr* < /ᶜr/, 'donkey' (cf. MECohen 1993:374f., 39; Pardee 2000:422 n. 24; Durand 2002:69 n. 165).

Akk. *e:arû*, 'eagle' < AA *ar-/*war- (HSED 15; Murtonen 1989:100f.; cf. Heb. *'ărî*, *'aryēh*, 'lion', JAram., Syr., Mand. *'aryā'*, 'lyon', Ar. *'arwīyatu*, 'ibex, wild sheep', Ge. *'arwē*, 'wild animal', Tig. *'arwē*, 'snake') < Eg. *rw*, 'lion', Ber. *awar*, 'wild animal' (cf. HALOT 87: 'African loan-word'). HSED 15f. distinguishes two original different etymons (*'ar-/war- and *'a-ruw-), but the length of of the Akk. lexeme favours a single Semitic etymon. Cf. also Akk. *armu*, 'mountain goat', a possible contrastive allophony.

Akk. *ūru(m)/urru*, 'roof' < Sum LW.

Akk. *ūru(m)/urū*, 'pudenda, pubic triangle' < *erû(m)*, *arû*, 'to be naked' (< /ᶜry/).

Akk. *ūru(m)/ḫūru* 'limb, shaft' > Sum. LW; like also Akk. *ar(um)*, *ḫaru(m)* probably unconnected with AA *'irVy-, 'stick' (HSED 30; cf. CDA 25, 427). Ar. *'iry-*, 'twig', related to the 'tent', is semantically suspect and secondary (cf. *supra* Ar. *'iryu*, 'stable' < /'ry/, 'to tie'; cf. AEL 51).

Akk. *urû*, 'a bowl' < Nuzi (?).

Ug. *irt*, 'breast, slope' (cf. Akk. *irtu*, *e:arûtu*, Syr. *ra(')tā*), Ar. *ri'atu*; also Akk. *ūru(m)/ḫūru* 'limb, shaft', possibly a PrimW of AA origin: *'ür-, 'belly, stomach' (HSED 36; Murtonen 1989:390, suggests a monoconson. root /r/, in turn related to *ūru(m)/ḫūru* cited above, although a derivation from the base /ḫr(r)/, Akk. *ḫarāru*, 'to dig': 'ext. stat. of part of body …'; D 'of part of a body, stat. 'is hollowed out'; 'make incisions' (CDA 107), is not to be ruled out.

Ar. *'aryu*, 'honey' < (?) (this lexeme does not exist in Ug.; cf. *nbt*).

Tig. *'ərora*, 'slope, declivity' < (?) /ġyr/.

Amh. *'awwärä*, 'poussière (soulevée par le vent)' (cf. DRS 13), (<humo <fuego?) smoke, fire.

/'vS-/

1 - First level: simple base

*/'aS-/ PrimW (?), non attested as a simple base, N/SWS. **BS:** 'sudden bad condition /situation': **Heb.** *'āsôn*, 'fatal accident' (cf. HSED 25); by metonyn. **Ar.** *'asanu*, 'grief, sorrow, distress' (cf. also DMWA 18), *ma'satu/ ma'sātu*, 'tragedy, drama' (DMWA 18); by conson. intens. Ar *'assa*, 'to corrupt, expoil' (DFA 30).

The deriv. morph. Ar. *'aswatu*, 'example, model' (DMWR 18), is not easily explained from this base (by enant. or as a metonym. shift < the painful situation as 'exemplary', 'endurable' (?)). - **SF:** Elementary human situation.

/'əS/ Of onomatop. origin, WSS.: **Ar.** *'as*, *'is*, 'cry used to keep the sheep afar', *'assa*, 'to keep away the sheep by crying 'Is ! Is !'' (DAF 30; also the epenth. intens. alloph. Ar. *'aws*, 'shepherd's cry on driving? the flock' (according to DRS 13).

The lexeme is no longer documented in modern Arabic and may be a late dialectal innovation. - **SF:** Husbandry.

2 - Second level: expanded base

/'aSaY-/ Denom. predic. deriv. by expan. /-ya/ < */'as-/ > /'as(a)+ya/, SWS. **BS:** 'to experience a bad condition': Ar. *'asiya*, 'to grieve, mourn' (cf. also DMWA 17f.).

Ar. *ya'isa*, *'ayisa*, 'to despair' (AEL 137, 2973f.; cf. also Ge. *'/'ayasa*, 'to waste away, languish, be turbulent, quarrel, groan in distress' [CDG 50]) could be considered prefix. and infix. expansions of this base. But the Heb. form /y'š/ connects them with the base /'aš-/ (cf. *infra*), even if semantically the first proposal is more suitable; there is possibly a coalescence of bases. Although semantically related, the Heb. morph could be of different origin ('despair' # 'to give up'). HSED 25 suggests an AA *'icay, 'to be sad, angry', as the etymon of Ar. /'sy/ (Murtonen 1989:97).

/'aSaW-/ Deriv. verb by expan. /-wa/ < /'as-/ > /'asa+wa/, CS alternative expansion with contrastive value (enant.) **BS:** 'to help escape from/overcome the bad condition', to cure': **Akk.** *asû(m)*, 'physician'; **NWS:** EpAram. *'sy*, 'to heal', 'physician', *'syw*, 'cure'; **Aram.:** JP/BAram. *'sy*, 'to cure, heal', *'sy, 'āsyā'*, 'physician'; *mᵉ'assā'*, 'healer' (DTT 724); Syr. *'asî*, 'to cure'; Mand. *asa*, 'to heal', 'to strengthen'; **Ar.** *'asā(w)*, 'to dress a wound' > 'to make peace', and by semant. shift > 'to be patient, to imitate, be equal...'; **Eth.:** Ge. *'asawa*, 'to heal, give power'.

It is commonly derived as a LW from < Sum. a-zu, 'Wasserkundiger' (AHw 76; cf. also HALOT 73; DRS 27, CDG 45; etc.), later borrowed in Aram., Ar. and Eth. So we would be dealing here with a 'cultural' word, for which such a loan is quite appropriate. Nevertheless the final long vowel remains unexplained in Akk. and points to a verbal root /'-s-w/. This means that the loan must be considered as in the opposite direction, i.e. as a Sumerian etymologization of a Semitic lexeme (?) (cf. Steiner 2003:639). The verbal root, not extant in Akk., but present in all the other Semitic languages, points in the same direction, unless we assume a denom. predic. derivation from Sum.-Akk.

On the other hand, NWS /'sm/, 'to gather', 'granary' (Ug., EpHeb., Heb., JAram./Syr. ['*assānā*]; cf. DNWSI 88; HALOT 73f.; LS 35; LW < Akk. *išittu* < **išintu*, NA *isittu*; cf. Murtonen 1989:97), CS /'sp/, 'to gather' (Akk. *esēpu*, Ug. and Heb. /'sp/) and also CS /'sr/, 'to bind', 'bond' (cf. HALOT 75), cannot be proved to be suffix. /-p.m:r/ expansions, through a traceable semantic shift, either from */'as-/ or from another hypothetical and unattested root (*/'vs-/). Instead it seems to be an instance of allothesis by aleatoric substitution of the third (sonant/labial) stop. Even /'sr/, 'to gather', in Ar., Heb., Aram. (cf. HALOT 82) points toward a more ample 'resonance'.

The base /m's/, 'to refuse' (Akk., Heb., Aram.; Murtonen 1989:253), could be related to /'as-/ as a prefix. /m-/ expan.; but cf. *supra* /m'n/ for a possible allothesis.

3 - Homographs/Loanwords

The following the conson. Akk. homographs can be listed:
asa'ītu, *asītu*, 'tower' < (?).
asu(m), 'myrtle' < (?).
asû(m), a wooden part of a loom < (?).
isu(m), *issu*, 'jaw' < (?).
asu(m), 'bear' (< Sum.)
essû, *esû*, 'hole in the ground, clay pit'.

/'-Ś-/

1 - First level: a) simple and b) intesified base

/'**vŚ**-/ Biconson. base with conson. intens. > /'aśś-/, SWS. **BS:** 'psychological exaltation': Ar. *'aššu*, 'vivacity, vanity', *'ašša*, 'to be very much alive and vain', *'ašāšu*, 'liveliness, vanity' (DAF 34).

Possibly also Akk. *ašāšu(m)*, 'to be distressed', may belong here by a privative (enant.) shift, as is possibly the case with the expansion Ar. *'ašā*, 'to forge (a lie)', *'ašiya*, 'to be in need' (DAF 36), all of which are semes of psychological reactions. Possibly Soq. *'éś*, 'to push', also belongs here. But this base is suspect and does not exist in any other Semitic language, not even in modern Arabic. Furthermore, no expansions can be clearly ascertained. Possibly this is a retro-contamination of sibilants in Ar. or an onomatop. resonance. Its relationship to Ge. *ḥašaya*, 'to make happy, to give joy', Akk. *ḥašāšu*, 'to swell, be happy', is not to be ruled out, as an allothetic variant and different expan. pattern. On the other hand, the Ar. homograph *'aššu*, 'dry bread/', adduced by Cohen (DRS 34), is not listed in the principal lexica. – **SF:** Psychological reaction.

/'aŠ-/

1 - First level: a) simple base

*/'**aŠ**-/ Biconson. base with spontaneous epenth. glide. /-w-/, WS. **BS:** 'action/object of giving': **Amor.** PN /'wš/ (CAAA 14); **Ug.** *'ušn*, 'present, gift', with /-n/ expan. and monophthongisation; **Heb.** PNN /'-š/; and with a specialised meaning? **Heb.** **'iššeh*, 'sacrifice', pl. *'iššîm*; (but cf. also *infra* /'əš/ c) 'fire', and contamination is also possible: 'gift by fire'); **ESA/ENA:** /'š, 'wš/, 'present' (Tairan 1992:65f.); **Ar.** *'awsu*, 'present', (DAF 68), cf. *infra* Ar. *'āsa*, 'faire un don'. Also Phoen.-Pun. *m'š*, probably 'votive donation'.

But as an alternative etymology cf. also < Amor. /ʿwš/, 'to help' (CAAA 14). An original trilit. base /ʾawš-/ cannot be ruled out. Instead, HSED 17 takes *aŝ- as an AA base, with a correspondence in Sab. *ʾs¹y* (!) (cf. *infra*, */ʾạš-/). - **SF:** Primary social action.

/**ʾəŠ**-/ a) **PrimW** by vocal. intens. (/y-/) W/SS. **BS:** 'strong' > 'male animal': **NWS:** Phoen.-Pun., EpHeb., EpAram., Palm., Hatr. *ʾ(y)š, ʾšt*, pl. *šm, ʾnš/t-*, 'man'; **Heb.** *ʾyš*, 'man, male'; **ESA:** Sab. *ʾys¹*, 'man, leading warrior'.

AA *ʾüs-, 'man' (HSED 36; also Rapallo 2000:2025ff.). This is possibly a PrimW (cf. the following deriv.) not to be deriv. from any other base (but cf. Murtonen 1989:96f.: < /ʾnš/). - **SF:** Elementary biological constituent.

/**ʾəŠ**-/ b) **PrimW** with conson. intens., NW/SS. **BS:** 'strong' > 'assuring, fortifiying point': **MHeb.** */ʾwš/, hitpol. 'to be strong, confirmed' (DTT 35; HALOT 100), *ʾûš*, 'foundation' (DTT 35); **Aram.:** BAram. pl. *ʾuššayā'*, 'Foundation'; JAram. *ʾûššā'*, 'foundation', 'fortification' (DTT 35); JBAram.: *ʾšt'*, 'bottom, lowest part, hold'; **ESA:** Sab. *ʾs¹*, 'base, socle'; **Ar.** *ʾussu*, 'foundation, basis, origin, root', by meton. > 'remain, relic'; *ʾasāsu*, 'foundation, basis'; **MSA:** Meh. *ʾas*, Śḥ. *ʾɛs*, 'difficulty', as a metaph. shift for 'firm, strong thing', cf. the caus. prefix. expan. *sōs*, 'foundation' (ML 338); Jibb. *səs*, 'foundation'.

Cf. Murtonen 1989:103. These are two different morphs. lexemes from the same base, produced by allomorphic distributive (vocal./conson.) intens. with different semantic shifts from the the same BS. - For Ar. **ʾaysa* [neg. *laysa*], 'there is', Arm. (Imp. Eleph. (?)) *ʾays*, 'existence, être' (cf. DRS 18) cf. *infra* /ʾvṭ/. - **SF:** Elementary material and sociological constituent.

/**ʾəŠ**-/ c) **PrimW** with no clear conson. intens. E/NWS. **BS:** 'fire': **Akk.** *ʾišatu(m)*; **Ebl.** /ʾišātu(m)/ (VE 783); Ug. *ʾišt*; **Heb.** *ʾeš*, suff. *ʾišš-*; **Aram.:** EpAram. *ʾš, ʾšh*; BAram. *ʾeššā'*; JP/BAram., *ʾyšh/t'*; Syr. *ʾešatā*; Mand. *ᶜšata* (MD 357f.); **Eth.:** Ge. *ʾesāt*; Tig. *ʾasat*; Amh., *asat*; Gur., *äsat*, 'fire'.

To be distinguished from /ʾər-/ (cultic//profane?) and without denomin. derivations, unproductive in Sem. < possible (nostratic) IE (Sansk.) etym. (DRS 36), that justifies the original triple homography. By cause-effect meton. > Ge. *teʾsit*, 'scum (of metals)' (CDG 569) - On the derivation < /ʾaš-/ 'gift, present' for Heb. *ʾiššeh*, 'sacrifice', as preferable to denomin. from < 'fire'; cf. Pardee 2000:28 n. 57; HALOT 93f. (but this meaning for Ug. *iṭt* is dubious). Later contamination of roots is possible. Cf. **AA** *ʾs-, 'fire', HSED 22; Murtonen 1989:102f.

1 - First level: b) intensified base

*/**ʾaŠ**-/ Denom. predic. deriv. by vocal intens. < /ʾaš-/ > /ʾāša/**, WS. BS:** 'to offer a gift': **Heb. PNN** /ʾāša/, *yʾwš*; **Ar.** *ʾāsa*, 'donner, faire un présent' (DAF 68); cf. also the possible alternat. allophon. expan. /-ya/ **ESA:** Sab. (?) *ʾs¹w:y*, 'to bring, send, find, be present' (cf. HSED 17).

/**ʾaŠ**-/ Denom. predic. deriv. by conson. intens. < /ʾəš-/ b) > /ʾaš(a)ša/, CS. **BS:** 'to lay the foundations': **MHeb.** *ʾiššeš*, 'to make firm, found' (DTT 130); **Ar.** *ʾassa, ʾassasa*, 'to lay the foundation'; **Eth.:** Tig. *ʾassäsä*, 'to set in order'. Cf. possible semantic shift > Amh. *ʾassäsä*, 'to scout, sweep' (?), and Mand. *ʾašaša*, 'bundle of reeds, raft'. And maybe also Akk. *ašāšu*, a type of nest made by water fowl.

For the possible Akk. isogloss *uššušu < uššu*, 'foundation', cf. AHw 1442 (but possibly < *eššu, edēšu*, 'to renew').

On the other hand. Zaborski 1971:54 quotes a root /'-Š/, 'to despair' with allomorphs in Ar. *ya'isa, 'ayisa*, and also in Ge. *'/'ayasa, 'esa*, 'to waste away, languish, be turbulent, quarrel, groan in distress' (CDG 50), BHeb. /y'š/ N and Pi. (cf. HALOT 382), MHeb. *yē'ēš*, Aram. *y^e'aš*, 'to give up' (DTT 560), possibly as privative (enant.) derivations (cf. Jastrow l.c.) of /'əš-/. But they could also be triconson. metathesis/allothesis: the biconson. base is not independently attested with that seme (/'-s/, /y-s/ (?)). These Ar. morphs could also be allomorphic metathesis (allothesis) of /'asaya/ (cf. *supra*).

2 - Second level: expanded base

It is difficult to assess the prefix. expansions of this base.

CS. /ra'š-/, 'head', could be considered as such (< /'əš-/, 'strong'; cf. in this connexion Eilers 1987-1988:39, following Kechrida 1984-1985 < Sem. /ušš-/, 'Grund(lage), Foundation'), but its nature of PrimW disallows this derivation (cf. Murtonen 1989:391). This derivation becomes more evident in the case of Heb./Aram. *rō'š*, 'poisonous plant'.

Other possible expansions are more controversial, above all the well-attested CS /'nš/ has a strong probability of being an infix. expan. of < /'əš-/, 'strong', BS: 'manifesting strength, power': Ug. *'inš, nšm*, (< /'nšm/), 'man, individual', 'people > '(dead) human beings', *bunušu* = Akk. *amēlum* (Ug. V 244-245); Heb. *^enôš*, 'human beings, man'; Aram.: BAram., JPAram. *^enāš*, 'mankind', 'person'; Mand. *anaša*, 'human being'; ESA: Sab. *'ns*, 'man, husband, leading warrior'; Ar. *'u/:insu, 'insānu*, pl. *'unūsu*, 'human being', 'a numerous company of men', *'insiyyu*, 'human', and deriv. *'anisa*, to be sociable'; Eth.: Tig. *'enās*, 'man'; MSA: Meh. *'ans*, 'human beings'; cf. Akk. *tenēštum*, 'people'. And the apheretic forms /ns/ in various languages, for instance Ar. *nās*, 'people, mankind' (Hava 15: < /'nšm/; cf. also > *nisā'*, 'woman', by complementary distribution(?), but cf. HALOT 93: < /nis-/). This base, as an AA expansion (PrimW?), may be related to Ber. *āles*, 'man, husband' (Essai 82). Instead, HSED 28 considers that the common AA *'i-nas, 'man', goes back, by epenthesis, to AA *nūs-, 'man' (p. 407), which however could well be an apheretical base as noted already (but a suffix. expan. /-ša/ < /'a:ən-/ 2), 'strength, power', cannot be ruled out; cf. also Rapallo 2000:2020, 2025ff.). On the other hand, the common deriv. < Ar. *'anisa*, 'to be friendly, intimate', seems semantically less feasible (cf. HALOT 73; DUL 84) and is to be explained the other way round. Instead, Murtonen 1989:96, distinguishes two Hebrew /'nš/ roots, a distinction which I consider phonologically incorrect. Cf. CDG 382 for a discussion of the root in Eth. Also Ug, *anš*, 'muscle, tendon', points in another direction (</ns-/; cf. Heb. *nāšeh*, Aram. *našyā'*).

In any case, this possible expansion is not to be related to /'nṯ/, Ar. *'anuṯa*. The partial semantic coincidence is secondary. As is clear from the ESA and Ar. Evidence: ESA *'nṯ*, Ar. *'unṯatu*, Meh. *tēṯ* (< /'nṯ/), Ug. *aṯt*, Heb. *'iššat*, Phoen. *'št*, BAram. *'nth*, JAram. *'in:ttetā'*, Syr. *'attā*. Mand. *anta, anat* (cf. Akk. *iššu(m), aššatu*, LW < Can.), Ge. *'anest*, Tig. *'essi, 'anes*, Tigñ. *'anəsti*, Amh. *anəst*, Gur. *ənəst*, 'female, woman'. An original phonological convergence (allophony) of both roots should not be presumed, since the semes are not related; a later contamination is quite evident. On the other hand, an infix. derivation /expansion of this root from < /'-ṯ/ is not clear.

As it was the case for /r'š/, Akk. *išaru(m)*, Ug. *ušr*, 'penis' could be taken as a suffix. deriv. from < /'əš-/ b), 'strong', 'male animal', but this is probably a PrimarW. By the same analogy (cf. *supra*), Eilers 1987-1988:39, suggests the expansion /'aš-d-/ > Akk. *išdum*, Ug. *išd*, 'foundation, Fuss', Heb. *'āšēd*, 'Berghang'; but the BS, as componential analysis indicates, is different: foundation as support/lower part. – Some consonantal homographs, such as Ar. *'awsu*, 'wolf, jackal/ Ge. *'awest*, 'bird of prey', or Ar. *'āsu*, 'myrtle', may be denominative from this base in origin, but we cannot trace their semantic shift with certainty.

3 - Homographs/Loanwords

Here are some of the conson. homographs of this cluster, among the many in Akk., for which no apparent relationship with the bases identified above is to be found:

Akk. *ašâtu*, 'reins' < (?).

Akk. *ašiš*, 'part of a chariot' <(?).

Akk. *ašāšu(m)*, 'to be distressed' < (?).

Akk. *ašītu(m)*, 'metal band' < (?).

Akk. *ašītu(m)*, 'midday' < (?).

Akk. *ašû(m)*, 'a disease of the head < (?).

Akk. *ašu*, a kind of field < (?).

Akk. *ašu*, 'living creatures' < (?).

Akk. *ašu*, 'to retch' < (?).

Akk. *ašu(m)*, 'distinguished, noble' < (?).

Akk. *ešû(m)*, 'to confuse' < (?).

Akk. *ušu(m)*, 'diorite' < (?).

/'aṢ-/

1 - First level: a) simple base

/'əṢ-/ **PrimW** with conson. intens. SWS. **BS:** 'something strong enough to support/tighten anything': **Ar.** *'iṣṣu*, 'root, foundation' (DAF 36); > *'aṣūṣu*, 'strong, robust' (DAF 36). Not attested in modern Ar.

This is an alternative alloph. resonance of /'əš-/, also related to /ˤəṣ-/, 'tree, wood' (cf. also /'az-/ and /ˤaz/) - **SF:** Basic structure/quality.

b) First level: b) intensified base

/'**aṢa**/ Denom. predic. deriv. by vocal. intens < /'əṣ-/ > /'āṣa/, NWS. **BS:** 'to exert force, oppress': **Heb.** *'āṣ*, 'to urge, to be in haste, to be too narrow', MHeb. *'aṣeh*, 'squeezed' (DTT 32).

/'**aṢa**/ Denom. predic. deriv. by conson. intens. < /'əṣ-/ > /'aṣ(a)ṣa/, SW/SS. **BS:** 'to be strong, tight': **Ar.** *'aṣṣa*, 'to be strong, robust' > 'to shine' (DAF 36); *'aṣṣaṣa*, 'raffermir' (DAF 36) // by enant. 'to be weak' > 'to shake', *'aṣīṣu*, 'shivering, trembling' (DAF 36); > Soq. *'ez*, 'to fear, be afraid': **Aram.:** JBAram. /'ṣṣ/, to press, squeeze'.

The various allomorph. expan. /'āṣa/**,** /'aṣṣa/**,** /'aṣā/ in Heb./Aram. (cf. DTT 32) strongly support a biconson. origin.

2 - Second level : expanded base

/'**aṢaW:Ya**/ Denom. predic. deriv. by expan. /w:ya/ < /'əṣ-/ > /'aṣa(a)+w:ya/, SWS. **BS.:** 'to become/make tight': **Ar.** *'aṣā*, 'to thicken (vegetation)', *'aṣiya*, 'to appear fat, stout (camel's hump)' > 'to be difficult, complicate (affair)' (DAF 37); by meton.-metaph. shift: Ar. *'āṣiyatu*, 'date syrup'

(< 'dense') (DAF 37); and by different metaph.-meton. (poetic?) semantic shifts from the BS: Ar. *'aṣiyatu*, 'disgrace'/ 'favour'/'relationship' (DAF 37).

As suggested above, resonance contamination with /'aš(a)ša/ is possible in this expansion. The base is not extant in modern written Ar.

From other possible expansions of this base, the following infix. forms are quite probable:
NWS: /'mṣ/, '(to be) strong': Ug., Heb., EpHbr. /'mṣ/, Pi. 'to make strong'/'strong'; and NWS: /'lṣ/, 'to press': Heb. /'lṣ/ Pi. 'to importune'; Aram.: Syr. *'elaṣ*, 'to oppress'; Mand. *alṣ*, 'to press'; JAram., Syr., *'ulṣānāh*, 'distress' (Hurvitz 1913:97); cf. NWS *mlṣh* ? (DNWSI 645).

Also semantically Ar. *'aṣlu*, 'root, foundation' and *aṣala*, 'to have root, to be firm', and derivatives, seem lexically a suffix. expansion related to *'iṣṣu*, 'root, foundation'; the form is present in Heb. in the deriv. transformation *'āṣîl*, 'noble' (< 'well rooted'); as well as in Nab. *'ṣl*, 'property'.

However, CS /n'ṣ/, 'to spurn, slander' or the like (Akk., Ug., Heb., JAram.; cf. Ar. /nwṣ/, 'to avoid s.o.'; cf. Murtonen 1989:269) is not easily explained as a prefix. expansion of /'əṣ-/. The same must be said of the consonantal homographs: Ar. *'aṣīṣu*, 'flowerpot' (in use nowadays); Aram. *'aṣūtā'*, 'basin'; Ar. *'aṣīṣatu*, 'line of houses'. The possible semantic shift is not apparent.

/'aT-/

1 - First level: a) simple base

/'aT-/ 1) **PrimW** (?) with alternative conson./vocal. intens, E/WS. **BS:** 'something indicating another thing > astonishing': **Akk.** *ittu(m)*, 'sign' (AHw 406); **Heb.** *'ôt*, 'sign'; **Aram.:** BAram. ** 'āt*, 'sign'; JAram. *'t*, 'sign'; Syr. *'ātā*, 'sign'; Mand. *ata*, 'mark, sign'; with glide **ENA:** Tham., *'yt*, *'t* 'signe, prodige' (cf. DRS 12; the reference to < /'wy/ does not seem feasible); **Ar.** *'āyatu*, 'sign, token'. The Ar. verb *'ayā* (*'āyatan*), 'to put a sign', seems to be a denominative from this base, but a derivation of /'ay-/ as a functor of identification cannot be excluded; or else contamination should be considered.

> Cf. Murtonen 1989:86. For the related term Akk. *ittu*, 'peculiarity' a deriv. from < *i:edatu, adānu* < /w°d/(?) is suggested, but a semantic shift from the basic seme would explain the nuance adequately. Ug. *at*, 'omen, ominous sign' (cf. DUL 121) is discussed as a possible reading (cf. Pardee 2000:553). - **SF:** Basic experience.

/'aT-/ 2) Lexicalisation of the former as functor, E/NWS. **BS:** *nota accusativi* as 'indication of...': **Akk.** *attū-,* 'belonging to' with poss. pron. suff.; **NWS:** Phoen., Pun, Phoen., EpHeb., EpAram., Palm. *'yt/'t*; **Heb.** *'et/t, 'ôt,* with phonol. contamination with /'ət-/ by complementary distribution by conson./vocal intens.

> Less probable > *'iyy-* > *'yt* > *'t* > *t*, functor of object (cf. DRS 16-17 (?)). Cf. *infra* /'ay-/ b); Testen 1997-1998:215-221; Testen 1997:655-660; Dolgopolsky 1999:43-46. – **SF:** Gramm. structuration.

/'əT-/ **PrimW** (?) with alternative conson./vocal. intens., E/WS. **BS:** '(at this) side', 'border, neighbour' > functor: **Akk.** *itû(m)*, 'boundary, neighbour', *itu-, ittû-,* 'with', *ita*, 'adjacent to'; **NWS:** Phoen., Pun. EpHeb. *'t*, 'prep. with, near, beside'; **Heb.** *'et, 'itt,* functor 'together with, by the side of'. Possibly derivation from the original seme is Heb. *'îtôn*, 'exterior' (# *peniîmî*) (cf. HALOT 44: unexpl.)

A possible original relationship of the two morphs/phenotypes can be postulated, since the 'side or frontier mark' could be the prototype of sings. - **SF**: Dimension of landscape.

1 - First level: b) intensified base

/**'aTa**/ Denom. predic. deriv. by conson. intens < /'ət-/ > /'at(a)ta/ (?), SW/SS. **BS**: 'to incline to one side' (cf. Sp. 'ladear'): **Ar.** *'atta*, 'to conquer' (DAF 7; no longer extant in modern Ar.); **Eth.:** Ge. *'atata*, 'to be removed, taken away, faint'; Amh. *'attätä*, 'to remove, take away, to commit '; > by vocal. alternative intens. > (?) Soq. *'óti*, 'faible'.

2 - Second level: expanded base

/**'aTaW:Ya**/ Denom. predic. deriv. by expan. /-w:ya/ < /'ət-/ > / /'at(a)+w:ya/, CS. **BS**: 'motion to', 'to approach', 'to (be)come near to, to this side', in contrastive opposition to the former: **Akk.** *(w)atû(m)*, 'to find' (?); **Ug.** *'atw*, 'to come, go'; NWS: Pun., EpAram., Palm., Nab., Hatra *'t':h*, 'to come, to go'; **Heb.** *'ātā*, 'to come'; **Aram.:** BAram. /'th/, 'to come'; JP/BAram. *'ty*, 'to come'; Syr. *'etā*, 'to come, arrive'; Mand. *ata*, 'to come'; **ESA:** Sab. *'atw:y*, 'to come, come back'; **ENA:** Tham. *'ty*; 'to come' (cf. DRS 36); **Ar.** *'atā(w:y)*, 'to come' (also DMWA 3); **MSA:** Soq, *'ete*, 'to pass, run, cross, go'; **Eth.:** Ge. *'atawa*, 'to come, return'; Tig., *'ata*, 'to enter, come'; Tigñ. *'atäwä*, 'to enter, come'. By meton./metaph. **Ar.** *'atā(w)*, 'to put forth fruit' (cf. Eng. 'income'), *'atwu*, 'way, course, mode ...'; **Eth.:** Amh. *atet*, 'fortune, richness', *atat* 'usury' [cf. Lat. 'producere' and the commercial vocabulary, 'movement (of accounts)': Sp. 'entrada'; also possibly EpAram. *'yt*, 'receipt' (?); Tig. *'awätä*, 'to be a creditor' (with epenth. ?)]; also, by a different semantic shift; **Ar.** *'atwu*, 'a great person' / 'vehement desease' ('something that happens suddenly', cf. Latin 'advenire'(?)), *'atiyyu*, 'what falls', 'an energetic man'.

Possibly **AA** *at- goes back to the PrimW /'ət-/ as its predic. realisation or as a denom. deriv. indicating motion to or along the 'border' (Sp. 'bordear'; cf. Essai 79; HSED 18; Murtonen 1989:104).
No other expansion can be assigned to this base with certainty.
Ar. *sa'atu*, 'throat side' and the denomin. predic. *sa'ata*, 'to strangle' (DAF 1035) are possible. On the other hand, the MHeb. form *nē'ôt*, 'to be agreed' (HALOT 26; cf. Pun. /'wt/ (?)) is in line with the semantic development as we find for instance in Sp. 'ponerse del lado de'. Also Jibb. *'εmt*, 'to, towards', represents a lexicalised infix. expansion /-m-/ of this base. Instead, LS 77 distinguishes a second *'éte*, 'to unite', as a /-t-/ infixed form of /'wy/, 'to go somewhere'.
The consonantal homograph Akk. *atû(m)*, 'gatekeeper', is a < Sum. LW(?); also, both Akk. *ittû(m)*, 'seed-funnel', and Heb. *'ēt*, 'ploughshare', seem to be KW/LW < Sum. (?). However, it is difficult to see how Ar. *'atwu*, 'butter', can belong here.

3 - Homographs/Loanwords

Akk. *uttūtu*, 'terror'' < (?).

/ˈəṮ-/

1 - First level: simple base

/ˈəṮ-/ Biconson. nomin./predic. base with vocal. intens./epenth, CS. **BS:** 'consistency, basic affirmation':
Akk. *išum*, 'to have', neg. *laššu*, '(there) is not'; **Ug.** *ʾiṯ, iṯti*, 'to be, exist'; **Heb.** *yēš/ˈîš*, 'to exist, be',
'property' (with alloph. /ˈ:y/); **NWS:** EpHeb. *yš*, EpAram. *ʾyt(y)*, *ʾt*, Palm., Nab. *ʾyt(y)*, 'there is',
'existence'; **Aram.:** BAram. *ʾītay*, 'existence' < 'there is' (HALOT 92); JPAram. *ʾt*, 'there is'; Syr.
ʾīt, 'to be', *ʾītya*, 'essence'. With anomalous alloph. transformation, Ar. neg. *laysa*, 'not to be' (DAF
1048; < *[la-yisa] < *[la-yiṯai (?)]; cf. HALOT 443); the original form is possibly reflected in the
conson. intens. form Ar. *ʾaṯṯu*, 'grand , abundant', *ʾaṯṯa*, 'croître en abundance' (DAF 9f.).

No expansions are extant nor is the root present in Ar. Or should Ar. *ʾaṯā(y)*, 'to denounce a fact to the
authorities' < 'to give it consistency' (?) (DAF 12), be related to this root as an archaism? The base is possibly
of nostratic origin, cf. IE es-, 'to be' (IEW 340) - **SF:** Elementary experience.

/ˈaṬ-/

1 - First level: simple base

/ˈaṬ-/ 1) Biconson. nomin. base with conson. intens. NWS. **BS:** 'slow and soft movement': **Heb.** *ʾaṭ*,
'dejected mood, gentleness', *lᵉ ʾaṭ, lā ʾaṭ*, 'gentl(y)'.

As a prefix. expansion, /š-/ may be considered Heb. *šᵉ ʾāṭ*, 'disdain', by a privative semantic bias (< 'to
make/consider of no value, of low courage'), but its convergence with /šwṭ/, 'to spurn' (also in JAram., Syr.,
Mand., Akk. [*šâṭu*] and even with NWS /šwṭ/, 'whip'), makes it difficult to decide the direction of the
expansion: either an /šṭ/ infix. or an /ˈaṭ/ prefix. On the other hand, Heb., Aram., Syr., Mand., Ar. /ˈṭm/, 'to stop
up (one's ear, lips)', exhibit a more obscure semantic relationship. - **SF:** Movement/psychological attitude.

/ˈaṬ-/ 2) Biconson. predic. base. Of onomatop. origin. **SWS:** 'sound produced by the saddle': **Ar.** *ʾaṭṭa*,
'to creak, produce a sound (the saddle)' and similar, *ʾaṭīṭu*, 'creaking sound of the saddle', and deriv.
in the world of the camel.

Cf. Murtonen 1989:88. - **SF:** Onomatopoeic sound.

3 - Homographs/Loanwords

Among the conson. homographs:
Akk. *ūṭu(m)*, 'span, half-cubit' < (?) (cf. Ug. *uṭ*; Ebl. *Udum*, DUL 123).

/ˈaW-/

1 - First level: simple base

*/ˈaW/ 1) CS functor: 'disjunctive as expression of choice, agreement, desire'.

Cf. Monoconsonantal 64-65. There is no evidence of a simple base */'aW-/, NW/SS, **BS:** 'action of meeting, agreement'; but /'aw/ 1) could be derived from it by lexicalisation. Instead, Zaborski 1971:54 refers to the root /'w:y/, 'to be nice', with allomorph. /n-/, /y-/ expansions in Heb., but I consider that the two bases have to be kept separate, since the second conson. is a constituent, not an alternative expan.; cf. *infra* /'y-/. Contamination between the two bases is easy to assume. - **SF:** Elementary social experience / discourse function.

/**'aW**/ 2) CS functor. exclam. deixis.: expression of surprise and pain and sorrow: **Heb.** *'ôy*, 'ah!', with expan. suffix. /'aw+y/; **NWS:** Phoen. *'wy*, 'woe!', 'to lament' (?); **Aram.:** NAram. *'ô*, 'o (vocative)', 'oh', /'wy/ = *uy*, 'alas!' (cf. the alloph. *way*, 'woe!'); **Eth.:** Ge. *'awet*, 'shout, cry' > *'aw(a)wa*, 'to shout'; Amh. *awalä*, 'to cry, bark'; and possibly with expan. by a suffix. /-n/, Palm., Nab. *'wn*, 'sarcophagus'.

Cf. Monoconsonantal 64; Murtonen 1989:84f. < as an imper. form of /'w(y)/, 'choose!'; I would reverse the derivation): suprasegmental diversification, cry of onomatopoeic origin. By semantic objectivation the names of various animals can be derived from this onomatopoeic lexeme (cf. a wolf howl) in the various Semitic languages: Heb. *'iy(yim)*, 'jackal', Syr. *(benat) 'awway*, '*canes aurei*'; Ar. *(ibn) 'āwā*, 'jackal'. Possibly of AA origin (cf. Essai 81; HSED 31). - **SF:** Elementary exclamation.

2 - Second level : expanded base

/**'aWaYa**/ Denom. predic. deriv. by expan. suffix. /-ya/ < /'əw-/ > /'aw(a)+ya/, WS. **BS:** 'to express/make a choice': **Heb.** *'iwwāh, hit'awwāh*, 'to wish'/'to crave for', *'awwāh*, 'desire, longing', N. *na'ăwāh*, 'to be beautiful, lovely', *ta*^{*ʾa*}*wāh*, 'longing, sighing'; **NWS:** Phoen. *'wy*, 'to desire' (?); **Aram.:** Syr. *'ewā*, 'to agree with', *'awyā*, 'unanimous'; **Ar.** *'awā(y)*, 'to be compassionate towards s.o.', and by semantic shift 'to betake to for/to give refuge', *ta'awwā*, 'to gather', *mā'wā*, 'abode'; > Ge. *'ayaya*, 'to make equal', *'ayāy*, 'equal, associate' >(?) *'ay(y)āyāt*, 'harvest'[?]; *'ayāt*, 'wafer (of honey)' > (?) *'ay(y)āyāt*, 'pure honey' (?): Soq. Gt *'ete*, 'to unite'.

With secondary expan. by /-an/: Syr. *'awwānā*, 'abode, house', *'awanta*, 'abode'; Mand. *auana*, 'quarter, precinct, living-room'. Also Akk. *awît(m)*, 'value (of goods)', could be related to this base through the seme 'to wish' or 'agree'. The ambivalence of the psychological seme involved may explain the variety of the semantic nuances in the various languages: to choose > to wish > to love > to agree > to unite > to gather > to be compassionate > to take/give refuge… Note the following additional possible expansions:
Heb. *nā'weh*, /'n'h/, /nwh/, /'wh/, i.e. the seme 'beautiful, delightful', may represent a contamination of bases or rather prefix. /n-/ expansions of the latter (HALOT 657, 678; cf. Zaborski 1971:55).
Heb. *tᵉ'ô*, 'antelope < appears to be a LW, but cf. the next entry.
Sab. *t'w*, 'to collect (water)' <? (cf. SL 10 < /'wy/ as /t-/ expan.?).
Syr. *'awtā*, '*acacia nilotica*' <?
Ge. *'awaya*, 'to be sweet' <?

/**'aY**/

1 - First level: a) simple base

/**'aY**/ **a)** Primary deictic exclam. of surprise /'a:iy-/, E/WS. **BS:** exclam.: **Akk.** /ai/, *â, ayyi, ayya/u*, 'alas!'; **Heb.** *'î(y)*, woe! = *'ôy*; **NWS:** Nab. *'yh*, 'oh!', with expan.; **Aram.:** JPAram. *'y*, 'oh!', emphatic

particle used before participles (DJPA 47); JBAram. *’î(y)*, 'woe!.(DJBA 109; as a particle > *’yt*, *supra*); Syr. *’y*, interj.; NAram.*’wy (ui!),* 'alas!', *’y(ê)*, ah!; **Ar.** *’ayā*, a vocative particle used in calling, 'O', 'ho there!'; by semantic deriv. > 'no'; **Akk.**, *ai*, *ē*, 'not'; **NWS:** Phoen. *’y*, negation (?); **MSA:** Soq. *’ē*, part. of negation; **Eth:** Ge. *’i-*, negative prefix. part.; Tig. *’i*, 'not'; Tigñ. *’ay*, expresses negative future; Amh. *i*, prefix. negative part. as a suprasegmental alternative imprecation; cf. Ar. *’î(y)*, 'yes!' (DMWA 36), due to the ambiguity of the psychological reaction.

SF: Elementary exclamation.

/**’aY-**/ b) Lexicalised deictic exclam. < /’aY/: 1) with spontaneous conson. intens. /’ayy-/, CS. **BS:** expression of surprise, identification: 'what is this' > 'voilà!' > 'which?' > 'anyone': **Akk.** *ayyu(m)*, 'which?', *ai*, 'where?'; **Amr.** *’ajja*, 'where? (CAAA 13); **Ug.** *ay*, 'anyone', *iy*, 'where'?'; **NWS:** Phoen., Pun. *ay*, 'where?'; **Heb.** *’ê(y)*, 'where?', by intens. *’ayyēh*, 'where?'; **Aram.:** Syr. *’aynā*, 'which?', *’aykā*, 'where?; NAram. *(’)êkâ*, 'where'; **MSA:** Meh. *ḥō* < /’yn/, where; **Ar.** *’ayyu*, 'who?, which?'; *’ay*, '(that is (to say), namely (DMWA 36); **Eth.:** Ge. *’ay*, 'which, what?'; Tig. *’ayi*, 'which?'; Tigñ. *ayän*, 'which?, who?'; Gur. *e*, 'where'. 2) With spontaneous vocal. intens. **Ar.** *’āyatu*, 'sign' > *’ayya*, 'to put a sign by which to be known', *ta’āya*, 'to direct the course, the body towards' (cf. Sp. 'señalar la dirección') and its functorial use before the pers. pron. *’iyya-* (but cf. *supra* /’at-/ 2)). - Expan. /-ya/ > /-wa/ by dissim. or contrast. suff. (?): Ar. *’aywa*, 'oui' (DRS 16); > Meh. *’yw(h)*, *’ēwa(h)*, 'yes' < *’ay-wā(h)*, Eth.: Ge. *’əwwa*, Amh. *awo*, Gur. *āwo*; Jibb. *’ēwəh*, *’ayweh*,. 'yes'.

Cf. ChCohen 2004:13*-15*. On the other hand, Ug.-Heb. /’i/, 'oh!'/,'surely', Ar. *’ī(y)*, 'yes!' (cf. Cohen 2004:16*-17*) may be considered a transformation from either of the quoted bases /’ay/ (cf. *supra*) through suprasegmental enant. - **SF:** Elementary exclamation.
Other phenotypes are related to the deictic base /’-y/ + -n (cf. *infra*; DRS 24-25): Heb. *’ayn*, 'whence?'; Ar. *’ayna*, 'where?'; < rhetorical question > negation: Ug. *in*, 'there is not'; NWS *’yn*, 'there is not'; Heb. *’ayn*, 'non-existence', '(there is) not'; Pun. *’yn*, 'there is not'; cf. metath. Akk. *ya’anu*, 'there is not' < *ayyānum*, 'where', common semantic shift. Their possible relationship to IE *ĕneu*, *ĕnu*, 'without' (IEW 318), is somewhat problematic.
Also, the semantic shift from local to temporal meaning can be derived from the same lexical bases: 'moment, indefinite time' (AEL 119) when? < > where?; cf. Ar. *’ayna*, 'where?' and *’ayyāna*, 'when?'; Ar. *(al-)(’)ān*, 'present time, moment' (DAF 71, 75) and its intens./expan.: *’a:iwānu*, 'a time' (AEL 129), Ar. *’anā*, 'to come the time, be near …'(AEL 118f.), *’inyu*, 'moment, indefinite time' (AEL 119) and its shift 'the utmost point or degree'; > Tig., Tigñ. *(’)əwan*, 'time', cf. Heb. *’ānā*, Pi. 'to cause to happen' (HALOT 70). Cf. AA: Eg. *wnwt*, 'hour' (Essai 83). The relationship to Nostratic *’am/’em*, 'time, moment', is problematic (NM 578).

1 - First level: b) intensified base

/**’aY-**/ Denom. predic. expan. </’ay/ > /’ay(a)ya/ SS. **BS:** 'to become so and so, adequate to (< 'anyone')': **Eth.:** Ge *ta’ayaya*, 'to make equal, even out'; Tig. *’ayay*, 'relative, kinsman'; cf. CDG 51 > Syr. /’wy/, to agree', *’āwē*, 'in agreement/', cf. *supra*).

This expan. (as well as those using /’aw-/ and /ha:y-/) may be connected with the metath. alternation /ya’-/ and its expan.: Heb. /y’y/, 'to be proper, fitting'; Ar. *ya’ya’a*, 'to show kindness'; Ge. *yawwəha*, *yawha*, 'to be gentle'; Pun. *y’*, 'beautiful'; JPAram. *yā’ê*, 'fair, comely', *y’yw*, 'beauty'; JBAram. *yā’*, 'oh!', *yā’ût*, 'well, properly'; Syr. *yā’*, 'oh!', *yāyā*, 'beautiful', *yāyûthā*, 'beauty'.

2 - Second level: expanded base

There are no clear expan. bases of this cluster :

Ar. *'ayā'*, 'to stop at, to head for…' (DAF 76; but not extant in modern written Ar.) is not easily related to any /'ay-/ b). HSED 18f. proposes an AA base *'ay-, 'to come, run', possibly connected with AA *'a-, 'to walk, run' (?).

Heb. /'ym/ II, 'to frighten', < *'āyōm*, 'terrifying', *'ê(y)māh*, 'fright, horror'; EpAram. *'ym*, 'terror, frightful thing', JOAram. *'ymh/'ymt'*, 'fear'; BAram. / JP/BAram. *'êmtān*, 'fearsome, terrifying', may represent a suffix. /-m/ expan. of < /'ay/ a) (< 'to cry 'ah!' ').

Ug. *šiy*, 'assassin'; Ar. *sā'a/sa'ā*, 'to displease'/'to create disorder', could also be taken as a prefix. /š-/ expan. of /'ay/ a) (< 'to cause fright, to make s.o. cry 'ah!' (?))

3 - Homographs/Loanwords

As for the consonantal homographs:

Akk. *ayyītu*, ''(a leather strap) for a door' < (?).

Heb. *'ayyāh*, 'vulture'; Ar. *yu'yu'*, hawk > possibly of onomatop.(?) origin from the animal's cry; cf. *supra* /'aw:y/; of AA stock, cf. Cush./Bilin *ayā*, 'falcon' (*Essai* 78; Murtonen 1989:89).

Phoen.-Pun. *'y*, 'coast, peninsula'; Heb. *'i*, pl. *'iyyîm*, 'island', instead, seems to be a LW < Eg. *íw*, 'island' (cf. *Essai* 81; Murtonen 1989:89).

JP/BAram. *'î(y)*, 'whether' < *'în* (NWS *'îm*).

Elsewhere, the confusion of the bases /'aw-/ and /'ay-/ (and even of /'at-/) in some derivations, especially in Ar., must be taken into account.

*/'aZ-/

1 - First level: a) simple base

*/'aZ-/ Biconson. base with spont. intens. WS/SS. **BS:** '(to be in) agitation, fever'.

Not attested as a simple base. – Cf. Eg. *3s*, 'hurry, flow fats' - **SF:** Basic (physiological) experience (animal's body).

1 - First level: b) intensified base

/**'aZ**-/ Denom. predic. deriv. by conson. intens. < */'az-/ > /'az(a)za/. ES/SS. **BS:** 'to set in agitation, to heat': by intens. and expan. /-ya/ (cf. *infra* /'azaya/): **Akk.** *ezēzu*, 'to be(come) angry'; **Ar.** *'azzā(i)*, 'to boil, make a boiling sound'; *'azzā(u)*, 'to kindle a fire to for boiling, to put in a state of violent motion, to stir up'; *'i'tazza*, 'to become angry'; by enant. Ar. *'azīzu*, 'sharpness' > 'cold', '(feverish) chill' (DAF 28; cf. Sp. 'tiritar de frío/fiebre', Fr. 'froissoner'); **Eth.:** Ge. *'azzaza*, 'order, comand, exercise dominion'; Tig., Tigñ., Amh., Gur. *'azzäzä*, 'to command'; by meton. < 'to set in motion, incite', already in Ar. *'azza*.

/**'aZ**-/ Denom. predic. deriv. by vocal. intens. < */'az-/ > /'āza/, SWS. **BS:** 'to become hot because of increasing proximity to the goal' (?) (by meton [cf. Sp. ¡caliente, caliente!] > 'to heat by agitating together' > 'approaching each other' < cause-effect (Sp. 'frotar, agitar' > includes both semes: 'to

join' and 'to heat'); **Ar.** *'āza*, 'être proche, vis-à-vis de', as already by intern. conson. intens. and meton. deriv. (?) Ar. *'azza*, 'to approach something to another thing' (DAF 28). The alternation of the two forms of intensification, prove the actual importance of the simple base, as does the semant. relationship: 'hot/close' (not listed either in DAF or in AEL).

2 - Second level: expanded base

/**'aZaW:Ya**/ Denom. predic. deriv. by expans /-w:ya/ < */'az-/ > /'az(a)+ya/, WS. **BS:** 'to irradiate heat': **Akk.** *ezû(m)*, 'to hurry, be hasty', by metaph. shift (?); **Aram.:** JPAram. *'zy*, 'to heat, burn'; **Ar.** *'azā*, 'to be high (said of the shadow)', as a consequence of the heat/sun (DAF 30); > probably by semant. shift: Ar. *'azā, 'aziya*, 'to gather, to shrink', by meton. cause-effect (?) < by boiling, possibly dialect. (DAF 30). Also Ar. *'aza'a*, 'to go back by fear' (DAF 28), by deriv. contrast. distribution; 'to satiate', by metaph. shift (< 'to heat'?; possibly < /ᶜz(z)/, 'to be strong').

No other expan. can be proved for this cluster.

3 - Homographs/Loanwords

Ug. *'uz*, 'goose' = Akk. *ūsu(m)*, Syr. wazzā, Ar. *('i)wazzu*, KW either < Sum. 'uz. (AHw 1438f.) or AA (cf. Murtonen 1989:85); the root is uncertain: /w-z/, /z-'/. For Steiner 2002:635, 646) a LW in Sum. from Akk. JBAram. *'azz*, 'to make erect (ears)' < ? /'zz/ (cf. DJBA 99); or better < /'zn/ < /'dn// by progressive assimilation.

Ar. *'azā*, 'to put a front', *'izā'u*, 'front, opposite, facing part' > 'corresponding' > 'manager' > 'means of sustenance' > 'place where the water is poured …' (AEL 55f.; DMWA 14: IV and n.) < ?

<div align="center">* * * * * * *</div>

Leaving aside the internal vocal. and conson. intensifications (lengthening) and geminations (reduplication) of the root, let us sum up the external root expansions in order to visualise their productivity and possible semantic significance. Some nominal lexemes with varying certainty as expansions are also mentioned.

Prefixation

Expansion by prefix. is rare in this series. We can propose, with a certain degree of probability, only the expansions by /y-/ and /t-/:
/ta+'aba/, 'to long for' < [*/'ab-/ 2)] (NWS).
/ta+'awa/, 'to collect (water)' < [*/'aw/] (Sab.).
/ya+'aba/ , 'to desire' < [/'ab-) 2)] (NWS).
/ya+'ala/ N, 'to act foolishly' < [/'al/] (Heb.)
Other expansions by /h-/, /m-/, /n-/ and /š-/:
/ha+'aba/, 'to flower' < [/'əb-/] (Syr.).
/ma+'ada/, 'to be(come) many, abundant' < [/'ad-/] (E/NWS).
/ma+'ana/, 'to refuse'/'to be disgusted' < /'a:ən-/ 1) (Heb./Syr.).
/ma+'ara/ 'to be unfriendly, to hate', 'to reopen a wound' <(?) [/'a:ēr-/] (Ar.).
/ma+'asa/, 'to refuse' (E/WS), cf. /m'n/ for a possible allothesis.

/na+ʼaqa/, 'to groan' < [/ʼaq-/] (CS).
/na+ʼata/, 'to be agreed' < /ʼət-/ (MHeb.; cf. Pun. /ʼwt/ (?); cf. Sp. 'ponerse del lado de').
/ša+ʼala/, 'to made one's own cry heard' > 'to exclaim' > 'to ask' < [/ʼal/] (CS).
/ša+ʼapa/, 'to gasp for air, to pant, to strive' < /ʼəp:f-/ (NWS).
/ša+ʼaya/, 'to displease'/'to create disorder' < [/ʼay-/] (Ar.).
　　　　Also, less certain and with enantiosemy, the /n-/ expansion(?):
/na+ʼapa/), 'to be(come) dry' <(?) [//ʼəb-//] (Akk.).

　　　　The semantic valence of these expan. morphemes is not specially significant. The lack of evidence precludes firm conclusions. The 'causative' valence of prefix. /h-/, /š-/ and /y-/ is much clearer, in keeping with its morphosyntactic value in NWS. In fact all three affix. expansions may well represent lexicalised morphs of the inflexional verbal system that have survived as independent phenotypes.
　　　　Some nominal expansions can also be listed:
/l+ʼm-/, 'people, tribe' < [/ʼəm-/] (CS).
/m+aʼs-at-/, 'disaster' < [*/ʼas-/](Ar.).
/m+ʼr-/ hif., 'painful, malignant' (Heb.)
/m+ʼš/, probably 'votive gift' < [*/ʼaš-/] (Phoen.-Pun.).
/n+ʼd-/, 'luxuriance', 'luxuriant crops' < [/ʼad-/] (ESA).
/n+ʼd-/, 'calamity' < [/ʼad-/] (Ar.), by enant.
/n+ʼm-/, 'to murmur, emit confused noises' [/ʼam-/] (Heb., Ar.)
/n+ʼr-/, 'to repudiate' (Heb.),
/nā+ʼw-/, 'beautiful, delightful' < [*/ʼaw/] (Heb.; cf. /nʼh/, /nwh/, /ʼwh/).
/r+ʼm-/, a wild animal < [/ʼam-/] (CS).
/r+aʼš-/, 'head' < [/ʼəš-/ (CS).
/r+ē'š-/, 'venom' < [*/ʼaš-/] (NWS)
/ša-ʼal-/, 'underworld' < [/ʼal/] (Heb.).
/ša+ʼat-/, 'side of the trhoat' > saʼata, 'to strangle' < [/ʼəṭ-/] (Ar.).
/ša+ʼāṭ-/, 'disdain' < [/ʼaṭ-/] (Heb.).
/ša+ʼiy-/, 'assassin' (Ug.) <[/ʼay-/] (Ug.).
/t+ʼm-/, 'twin' < /ʼəm-/ (CS).
/t+ʼr-/, 'glory', 'presence' <(?) [/ʼa:ēr-/] (NWS).
/ta+ʼaw-/, animal name < [*/ʼaw/] (Heb.).

Infixation

　　　　Infixation seems to be not only rare in the series, but also semantically not very self-evident, sometimes implying a semantic shift that is not easy to trace. Possible examples are as follows:
/ʼa+ha+ba/, 'to like, love' < */ʼab-/ 2) (NWS).
/ʼa+ha+ra/, 'to be inflamed, infected (tooth)' < [//ʼa:ēr-/] (Meh.).
/ʼa+la+ṣa/, 'to press' < [/ʼəṣ-/] (NWS).
/ʼa+ma+ṣa/, '(to be) strong' < [/ʼəṣ-/] (NWS).
/ʼa+ma+ra/, 'to see', 'to say', 'to order' <(?) [//ʼa:ēr-/] (CS).
The following are more obvious:
/ʼa+m(i)+ḍa/, 'to be indifferent to offences' <(?) [*/ʼaḍ-/] (Ar.).
/ʼa+n(a)+ḫ:ḥa/,'to sigh, groan' < [/ʼaḫ-/ (E/WS).
/ʼa+n(a)+ḥa/, 'to breath hard, with a hemming in his throat' < [*/ʼaḫ/] (Ar.). Note also:

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/'a+n(a)+pa/, 'to snort > 'to be angry' < [/'anp-/] (Heb.), which is an infix. /-n-/ expansion or nasalisation of /'əp:f/.

/'a+na+qa/, 'to groan' < [/'aq-/] (CS), an allophone of /n'q/, /nhq/.

/'a+na+ša/, 'to be(come) weak' < [/'əš-/] (CS).

/a+r(r)ä+zä/, 'to wear out, to be wanting' <(?) [*/'ad̲-/] (Amh.).

/'a+w:ya+ha/, 'to utter a cry of grief' < [/'ah/] (SWS).

/'a+y(a)+da/, 'to show force, power' < [/'ad/] (WS/SS).

The expan. infix. /-w:ya-/ is very similar to the vocal. intens. and could be considered a secondary development of it. Much in the same line, the infix. /-n-/ expansion could be taken as a case of spont. nasalisation, especially of labial stops. Instead, the case of /-h-/ could be a clearer example of epenthetic infixation.

The following nominal infix. expansions can be mentioned:

/'u+l+ṣ+ān-/, 'distress' < [/'əṣ-/] (Syr.).

/'ə+m+t-/, 'to towards' < [/'əṭ-/ (Jibb.).

/ə+n/m+b-/ 'fruit, flower', 'flower(-shaped jewellery)' < [/'əb-/] (Akk.).

/'i+n+b-/, 'fruit, produce' < [/'əb-/] (JAram.).

/'a+n:m+bub-/, 'tube, flute, (reed-)pipe' < [/'əb-/] (Mand.).

/'u+n+būb-/, 'an internodal portion of a reed or cane' [/'əb-/] (Ar.).

/'a+n+aq-/, 'small goat' <(?) [/'aq-/] (Ar.; > Akk. *anāqāte*, she-camels).

/'a+n+āš-/, 'the strong', 'man' < [/'əš-/] (CS).

/'i+n+y-/, 'moment, indefinite time' < [/'ay-/] (Ar.).

/'a+š+r-/, 'joy' <(?) [//'a:ēr-/] (Phoen.).

/'a+y(a)+l-/, 'stag, deer' < [/'əl-/] (CS).

/'a+wa+l-), 'the most prominent in power', 'the first' < [/'əl-/] (E/WS).

/'e+w+īl-/, 'fool' <(?) [/'al/] (Heb.).

/'a+w+s-/, 'present' < [*/'a-š/] (Ar.).

/'e+y+al/, 'strength' < *'ayl*, 'mighty tree, pillar of an archway' < [/'əl-/] (Heb.).

/'i+y+al-/, 'help' <(?) [/'əl-/] (Syr.).

/'a+y+š-/, 'existence, being' < [/'əš-/] (Aram., Ar.: neg. *laysa*).

Suffixation

The suffix, however appears as the most significant means of root expansion, with the possibility of singling out a particular semantic specification for each of the expan. morphemes[20]. The most productive, as might easily have been expected, are the suffix. /-wa/ and /-ya/ expansions, the first with a more marked steady 'stative' aspect:

/'ab(a)+wa/, 'to become a father' [< /'ab-/ 1)] (WS/SS).

/'aḫ(a)+wa/, 'to become a brother, tied to' < [/'aḫ-/ a)] (CS).

/'am(a)+wa/, 'to become a slave' [<*/'am-/ 1)] (WS/SS). And less clearly:

/'as(a)+wa/, 'to help escape from/to overcome a bad condition', 'to cure' [</'as-/]. In this case we have to take into account the deriv., if it is correct, the supposed enantiosemic process and in general the possible secondary exchange between /w/ and /y/ as expan. morphemes[21].

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20. For an outline cf. Hurwitz 1913:70ff.; Moscati 1964:168f.; Ehret's classification (1989:198f.), however, seems over-imaginative.

21. Cf. Moscati, 166.

In this case the apparent 'anomaly' in South Semitic (Ar., Ge.) regarding the presumed 'stative' semantic value, must have been induced by the contrastive distribution imposed by Ar. *'asiya*, 'to grieve, mourn' from the same original etymon /'as-/ with a transitory 'stative' aspect (cf. also /'aṣa(a)+w:ya/ and /'az(a)+ya/. A similar situation can be seen in:

/'ad(a)+wa/, 'to show superior, dominant position or power' [< /'ad-/] (E/SWS) and /'ad(a)+ya/, 'to exert/suffer a superior/inferior dominant (economic) position or power', although this time according to a more original normal distribution of the semantic values of both expan. morphemes.

The /-ya/ expansion, instead, has a clear 'effective' or factitive aspect regarding the basic meaning of the biconsonantal cluster involved:

/'ab(a)+ya/, 'to take a decision, positive or negative: to will/refuse' [< /'ab-/ 2)[?]] (WS/SS).

/'ab(a)+ya/, 'to product fruit, to fructify' [< /'əb-/] (CS).

/'ad(a)+ya/, 'to exert/experience a superior/inferior dominant (economic) power' < [/'ad/] (E/WS).

/'aḏ(a)+ya/, 'to produce an */'aḏ-/, 'damage', of any kind' [< /'aḏ -/] (WS).

/'ḏ+n/, 'to dismiss, to allow s.o. to depart' < [*/'əḏ-/] (ESA).

/'aḍ(i)+ma/, 'to be angry against, to persecute s.o.' <(?) [*/'aḍ-/] (Ar.).

/'ẓ+y/, 'trouble, distress' <(?) [*/'aḍ-/] (Sab.), allophone (?).

/'ak(a)+ya/, 'to feel in a bad mood, to show it' [< /'ak-/] (SS/Eth.), possibly originally /'ak(a)+wa/, according to the normal semiconsonantal switch in south Semitic. In any case, 'to show a bad mood' may easily equal 'to behave in a bad mood'. Cf. also Akk. *i:ekû(m)*, 'to starve, deprive (of food)', 'impoverished, bereaved'.

/'al(a)+ya/, 'to utter an /'al/ cry' < [/'al-/] (WS); normally the denom. predic. reproducing onomatop. sounds are factitives of the /-ya/ type.

/'al(a)+ya/, 'to show/exert power' < [/'əl-/] (WS/SS), but the Ar./Heb. variant seems to be stative with enant. shift and so /'al(a)+wa/, 'to fall short of'.

/'an(a)+ya/, 'to groan' < [*/'a:ən-/ 1)] (WS), of onomatop. origin.

/'ap(a)+ya/, 'to encircle', 'to cover' < [/(ap-/] (NE/NWS).

/'ap(a)+ya/, 'to blow the fire', 'to cook, boil' <[/'əp:f-/] (CS), of onomatop. origin.

/'aq(a)+ya/, 'to displease (of food)' < [/'aq-/] (Ar.).

/'ar(a)+ya/, 'to burn' < [/'a:ər-/] (SS), once again the Eth. realization [-wa] is idiosyncratic.

/'as(a)+ya/, 'to experience a bad condition' < [*/'as-/] (SWS), cf. *supra* on the possible origin of this apparently anomalous morphosemantic phenotype.

/'aś(a)+ya/, 'to forge (a lie)' < [//'vś-/] (Ar.).

/'aš(i)+ya/, 'to be in need' < [//'vś-/] (Ar.).

/'aš(a)+ya/, 'to bring, send, find, be present' < [/'aš-/] (ESA), the phenotype is extant only in Sab., in alternation with the most common type /'āša/, 'to offer a gift' (Ar./Heb.).

/'aṣa(a)+ya/,'to become/make tight' (vegetation)/'to look out fat' < [/'əṣ-/], this is the same alternation of factitive/stative phenotypes already pointed out in the case of /'as(a)+ya/ in Ar.

/'aw(a)+ya/, 'to express/make choice' < [/'əw-/] (WS).

/'az(a)+ya/, 'to irradiate heat' < [*/'az-/] (WS), here also Ar. exhibits an alternative morphosyntactic variant [/-w:ya].

/'a(y)n(a)+ya], 'to come the time, be near …' (Ar.) > /'ā(y)na+ya, Pi. 'to cause to happen' (Heb.).

Other suffix. expansions appear to be less productive, especially in verbal phenotypes. In this connexion we can list a few with a factitive bias, in keeping with the semantic value of the morphemes:

/'aba+ha/, 'to act as a superior authority/' > 'appoint a subordinate' < [/'ab-/ 1)] (SS).

/'aga+ma/, 'to burn hot, glow' < [*/'a:əg-/] (E/WS).

/'aṯa+ma/, 'to stop up (one's ear, lips)' < [/'aṯ-/] (WS).

/'aya+ma/ 'to frighten', < *'āyōm*, 'terrifying', *'ê(y)māh*, 'fright, horror' < [/'ay-/] (Heb.).

/'ana+ša/, 'to manifest/produce physical pain' < [/'a:ən-/ 1)] (WS).

/'ara+ša/, 'to desire' <(?) [//'a:ēr-/] (E/NWS).

Expansion by a suffixed /-r/ seems to be less tolerated:

/'apa+ra/, 'to cover' < [/'ap-/] (Akk.).

However quite a number of nominal suffix. expansions (/-h, -l, -n, -r, -y/) can be singled out, some based on intensified consons. bases:

/'ab(b)(v)+r-/, 'strong, robust', male animal, 'bull, horse' < [/'ab-/ 1)] (E/NWS).

/'əb+r-/, 'limb, wing, *membrum virile'* < [/'ab-/ 1)] (E/WS).

/ab+ša/, 'term of respect for women' <(?) [/'ab-/ 1)] (Tigñ.).

/abu+al-/, 'offspring, young creature' <(?) [/'ab-/ 1)] (Mand.).

/'ab(b)a+y-/, 'prayer' (Aram., Mand) < [/'ab-/ 2)ʔ] (WS/SS).

/'eby+ān-/, 'poor' (Amor., Ug., Heb.) < [*/'ab-/ 2)] (WS).

/'ad+ān-/, 'owner of power, lord' < [/'ad-/] (NWS].

/'ad+m-/, 'man' <(?) [/'ad-/] (CS).

/'ad+r-/, 'wonderful, strong' <(?) [/'ad-/ (WS).

/'ād+y-/, 'violent waves' < (?) [*/'ad̲-/ (Ar.).

/'z+l/, 'to go away' <(?) [*/'əd̲-/] (Aram./Heb.).

/'aza+l(i)+y-/, 'long since past, eternal' <(?) [*/'əd̲-/] (Ar.).

/'aḫ+r-/, 'another' <(?) [/'aḫ-/] (CS).

/'aḫ+l/, 'if only!' < [*/'aḫ/] (NWS).

/'ak+š/, 'something disgusting, e.g. spittle, vomit, faeces' <(?) [/'(v)k-/] (Amh.).

/'al(a)+h-/, 'supreme power, god' < [/'əl-/] (W/SS).

/'əl+ān-/, 'supreme power, god' < [/'əl-/] (WS).

/'al(l)+ān-/, 'something that appears strong' > 'oak' < [/'əl-/] (E/WS).

/'ûl+m-/, 'strength, strong side' < [/'əl-/] (Aram.) .

/'ê:ûl+ām-), 'porch, entrance' < [/'əl-/] (Heb./JAram.).

/'ap+n-/, 'that binds, wheel' (Heb., JAram., Syr.) < [/'ap-/] (NWS).

/'iš+ar-/, 'penis' < [/'əš-/] (Akk., Ug.).

/'ās+ān-/, 'fatal accident' < [*/'aṣ-/] (Heb.).

/'as+an/, 'grief, sorrow, distress' < [*/'aṣ-/] (Ar.).

/'uš+n/, 'present, gift' < [*/'aš-/+ (Ug.).

/'āṣ(i)+y-at-/, 'date syrup' < 'dense' < [/'əṣ-/] (Ar.).

/'aṣ+l-/, 'root, foundation' < [/'əṣ-/] (Ar.).

/'āṣ+îl-/, 'noble' (< 'well-rooted') < [/'əṣ-/] (Heb.).

/'ṣ+l-/, 'property' < [/'əṣ-/] (Nab.).

/'a:iw+ān-/, 'a time' (Ar.) > *ǝwan*, 'time' (Tig., Tigñ.).

/'a:i(y)+n-/, 'there is not', 'non-existence' (NWS) > *ya'anu*, 'there is not' (Akk.).

/[al]-(')ā(y)n-/, 'present time, moment' < [/'ay-/] (Ar.).

/'aw(w)+ān-/, 'abode, house' < [*/'aw/] (Syr., Mand.).

/awa+y-/, 'value (of goods)' < [*/'aw/] (Akk.).

/'ay+m-/, 'terror, frightful thing' < [/ay-/](NWS).

/'ayn/, 'whence?' < [/ay-/] (Heb.).

/'ay+na/, 'where?' (Ar.) < [/'ay-/] (Ar.) > *ayyānum*, 'where' (Akk.).

/'ay(y)+āna/, 'when?' < [/'ay-/] (Ar.).

Only at the conclusion of our research shall we able to draw more definitive conclusions on the significance of all the possible morphemic expansions of the biconsonantal bases and on their bearing as productive and inexpensive tools for the development of the Semitic lexicon.

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Language abbreviations

		Gr.	Greek
		Gur.	Gurage
AA	Afro-Asiatic	Har.	Harari
AEA	Ancient Epigraphic Arabic	Hatr.	Hatrean
Akk.	Akkadian	Heb.	Hebrew
Amh.	Amharic	IE	Indo-European
Amor.	Amorite	ImpAram.	Imperial Aramaic
Ber.	Berber	JA	Judean Aramaic
BAram	Biblical Aramaic	JAram.	Jewish Aramaic
CS	Common Semitic	JBAram.	Jewish Babyl. Aramaic
Cush.	Cushitic	Jibb.	Jibbali
Ebl.	Eblaite	JPAram.	Jewish Palest. Aramaic
EChad.	Eastern Chadic	JPA	Jewish Palest. Aramaic
Eg.	Egyptian	Lat.	Latin
Emar.	Emariote	Lih.	Lihyanic
ENA	Epigraphic North Arabic	MaghrAr.	Maghrebi Arabic
Eng.	English	Mand.	Mandaic
EpAram.	Epigraphic Aramaic	Meh.	Mehri
EpHeb.	Epigraphic Hebrew	MHeb.	Middle Hebrew
ES	East Semitic	MSA	Modern South Arabic
ESA	Epigraphic South Arabian	NAram.	Neo-Aramaic
Eth.	Ethiopic	NWS	North-west Semitic
Ge.	Ge'ez	Pers.	Persian

Phoen.	Phoenician	enant.	enantisemy, enantisemic
Pun.	Punic	epenth.	epenthetic
Sab.	Sabaic	etymol.	etymology
Saf.	Safaitic	exclam.	exclamation
Sansk.	Sanskrit	expan.	expansion, expanded
SES	South-east Semitic	gemin.	gemination, geminative
Som.	Somali	infix.	infixed
Soq.	Soqotri	intens.	intensification, intensified
Sp.	Spanish	KW	Kulturwort
SS	South Semitic	laryng.	laryngeal
Syr.	Syriac	later.	lateral
Śḥ.	Śaḥri	LW	loanword
Tig.	Tigre	metaph.	metaphor, metaphorical
Tigñ.	Tigriña	monthn.	month name
Tur.	Ṭūrōyo	mythol.	mythological
Ug.	Ugaritic	neg.	negative
YemAr.	Yemeni Arab	nom.	nominal
		onomatop.	onomatopoeia, onomatopeic

General abbreviations

		part.	particle
		p.p.	past participle
adv.	adverb, adverbial	predic.	predication, predicative
affirm.	affirmative	prefix.	prefixed
alloph.	allophone, allophonic	PrimW	Primary Word
altern.	alternation, alternative	progr.	progressive
apoph.	apophonic	pron.	pronoun
assim.	assimilation	reduplic.	reduplication, reduplicative
biconson.	biconsonantal	SF	semantic field
BS	basic seme	s.o.	someone
conj.	conjunction	spont.	spontaneous
conson.	consonant, consonantal	s. th.	something
contrast.	contrastive	suffix.	suffixed
denom.	denomination,denominative	synon.	synonymous
deriv.	derivation, derivative	triconson.	triconsonantal
design.	designation, designative	variat.	variation
deverb.	deverbation, deverbative	vocal.	vocalic
dialect.	dialectal	#	with the antonym
distrib.	distribution, distributive		
emph.	emphatic		