

The Monoconsonantal Lexical Series in Semitic*

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[This thorough analysis seeks to establish the phonological and semantic nature and etymology of the whole Semitic /Cv/ lexical series. It emerges that many phonemes - in particular the characteristic Semitic velar, pharyngeal and velarized sounds - are unproductive in this regard. The series concentrates on the functorial class, with no verb and possibly no Semitic noun of the /Cv/ structure. Most of the functors probably go back to a primitive pre-Semitic lexical layer]

The 'etymological' study of the Semitic languages has usually begun with 'roots' or lexemes; but that, in fact, should be the final outcome. The actual starting point of this type of analysis has to be the phonemic constituents and basic semantic reference, in order to progress from them towards the 'laws' or phonological restraints and the derivative 'semantic' patterns that govern lexical development.¹

Thus we begin the study of the Semitic lexical material by starting from its simplest phonemic units in order to follow the process of development up to the most complex phonological organisations (polysyllables or 'symphonemes') at work in it. Assuming the phonetic/phonemic pre-lexical system of the Semitic family as a given,² the 'lexicographical' approach takes as its minimal or 'atomic' unit simple or

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1. Cf. Y. Malkiel, *Etymology*, Cambridge 1993, pp. 143ff.; L. Zgusta, *Manual of Lexicography*, The Hague/Paris 1971, pp. 199ff.; P.R. Lutzeier, *Lexikologie. Ein Arbeitsbuch*, Tübingen 1995, *passim*.

2. Cf. the classic descriptions of the Semitic phonetic (consonantal) system by S. Moscati, *Il sistema consonantico delle lingue semitiche*, Rome 1954; W. Leslau, "The Semitic Phonetic System", in *Fifty Years of Research*, Wiesbaden 1988, pp. 21-25 (= L. Kaiser, ed., *Manual of Phonetics*, Amsterdam 1957, pp. 325-329); and the more innovative descriptions by J. Cantineau, "Le consonantisme du sémitique", *Semitica* 4, 1951-52, 79-94; A. Martinet, "Remarques sur le consonantisme sémitique", *BSL* 49, 1953, 67-78; U. Rapallo, "Problemi di linguistica teorica relativi al consonantismo semitico, con particolare riguardo al medio-ebraico e all'aramaico giudaico", *AGI* 58, 1973, 105-136. For a last treatment of the Semitic phonology on a rather classic line cf. E. Lipiński, *Semitic Languages Outline of a Comparative Grammar* (OLA 80), Leuven 1997, pp. 95ff. On the Proto-Semitic and Afroasiatic phonological system in general cf. I. Diakonoff, *Afrasian Languages*, Moscow 1988, pp. 34-41 ('Phonology'); id., *Proto-Afrasian and Old Akkadian. A Study in historical phonetics*, Princeton, NY 1991-2, pp. 5ff. ('Proto-Afrasian Phonology'); A.R. Bomhard, J.C. Kerns, *The Nostratic Macrofamily. A Study in Distant Linguistic Relationship*, Berlin/New York 1994, pp. 91ff. ('The Proto-Afroasiatic Consonant System'); A.R. Bomhard, "The Reconstruction of the Proto-Semitic Consonant System", in *Fs. Ehrman*, pp. 113-140. For the phonology of the individual Semitic languages cf. the latest treatment in A.S. Kaye, P.T. Daniels, eds., *Phonologies of Asia and Africa*, vol. I, Winona Lake, IN 1997, pp. 3ff. For a comprehensive bibliography on Semitic phonology cf. my

'open monosyllabic' lexemes (/Cv/),³ since there are no isolated phonemes (vowels) which are lexico-semanticly relevant in the Semitic languages. Every lexeme begins (as in Proto-Indo-European) with a consonant (or glottal stop), which in turn requires a vowel for its proper articulation, since an initial consonantal cluster is also excluded.⁴ Nevertheless, we prefer to speak of a 'monoconsonantal' or 'monoradical' series, taking into account the functional and semantic variability and alternation of the 'vocalic' realisation which leaves the consonant/radical as the fixed nuclear element from the semantic point of view. In this way we avoid controversial issues concerning the 'syllable' in Semitic and assume a more empirical point of view. Accordingly, we shall refer to monosyllabic, monoconsonantal and monoradical lexemes as freely interchangeable terms.

In this monoconsonantal series more than anywhere else it is thus possible to determine the significance of the syllable (/Cv/: onset and rhyme) as the actual starting point of lexicographical (phonological and semantic) analysis. Focussing on the syllable allows us, on the other hand, to extend the set of lexematic possibilities considerably and to some extent nullify any apparent amphibology.⁵ But we cannot also ignore the possible morphemic functionality (cases) of these realisations in this ('nominal') series, which drastically reduces the original lexical possibilities, substituted by the above mentioned grammatical functionality. Nonetheless, account must also be taken of the dual vocalic value (short, long) as a principle of differentiation and semantic opposition in unavoidable final position.⁶ Here also number and grammatical functionality (singular, plural) will interfere and reduce such lexical availability.

Lexicographically, it is possible that the monoconsonantal series represents the most primitive stratum of the Semitic languages and takes us back to a stage of linguistic indifferentiation in relation to

forthcoming "Bibliography of Classic Semitic Linguistics (1940-1995)" (1.6. PHONOLOGY).

3. The possibility of a closed monosyllable /CvC/ is not considered here, assuming that in this case we usually have an actual 'bisyllable' or biradical lexeme with final vowel (/CvCv/), original or affixed. At all events, we are dealing in that case with a 'biconsonantal' base/root; in this connection cf. E. Lipiński, "Monosyllabic nominal and verbal roots in Semitic Languages", in *Fs. Leslau*, vol. II, pp. 927-930.

4. Cf. J.J. MacCarthy, *Formal Problems in Semitic Phonology and Morphology*, Diss. MIT 1979, p. 23 ("only glides and true consonants, but not vowels, can appear in onset position"); Bomhard-Kerns, *The Nostratic Macrofamily*, pp. 109-111 ('Root Structure Patterning in Proto- Afroasiatic'); Diakonoff, *Proto-Afrasian and Old Accadian*, pp. 67ff.; cf. *infra* n. 10. For an opposite controversial opinion in this regard cf. R.M. Voigt, *Die infirmen Verbaltypen des Arabischen und das Biradikalismus-Problem*, Stuttgart 1988, pp. 13ff., 180-183. In fact, 'vowels' and 'consonants' are phonetic 'abstractions' or rather pre-phonological constituents; phonology begins with 'syllables' in the Semitic and Indo-European families as well; cf. E. Martínez Celdrán, *Fonética*, Barcelona 1994 ('Los conjuntos de rasgos: los segmentos [vocales y consonantes]', pp. 265-358; 'Combinatoria [la sílaba]', pp. 359-373); Ž. Muljačić, *Fonología general*, Barcelona 1969 (Sp. version) ('Fonología de la palabra [los fonemas, la sílaba]', pp. 197-259); S. Gili Gaya, *Elementos de fonética general*, Madrid 1966 ('Fonética y fonología', 'La sílaba', pp. 82-104).

5. On syllable structure and the bearing of vocalism in Semitic cf. for instance: J. Kuryłowicz, *L'apophonie en sémitique*, Wrocław-Warszawa 1961; P. Fronzaroli, "Sull'elemento vocalico del lessema in semitico", *RSO* 38, 1963, 119-129; McCarthy, *Formal Problems*, pp. 16ff.; A. Fox, "Autosegmental phonology and Semitic", *PCLS* 18, 1982, 131-139; M. Svolacchia, "Teoria autosegmentale e morfologia discontinua semitica", *LeSt* 26/1, 1991, 87-120; A.G. Belova, "Sur la reconstruction du vocalisme afro-asiatique: quelques correspondances égypto-sémitiques", in H.G. Mukarovsky, ed., *Proceedings of the Fifth International Hamito-Semitic Congress. Vol. 2: Cushitic ...*, Vienna 1991, pp. 85-93; id., "Sur la reconstruction du vocalisme radical en arabe et en sémitique", in *Fs. Petráček*, pp. 81-88; L. Edzard, "Semitic Phonology and Preference Laws for Syllable Structure", *Fs. Leslau*, vol. I pp. 397-410. We start from the classic vocalic three-realizations as defined in the standard comparative grammar (Brockelmann, Moscati); but cf. M.S. Anwar, "Semitic has four vowels", in *Fs. Lehisté*, pp. 295-305; and more references on the subject in the bibliography mentioned *supra* n. 2.

6. Cf. Gili Gaya, *Elementos*, pp. 40ff.; Martínez Celdrán *Fonética*, pp. 244ff.; A. Corré, "A suprasegmental feature of Length in Semitic", *AAL* 2/9 219, 1975, 9-14 (157-162); D. Yang, "Length in Proto-Semitic", *JAC* 3, 1988, 24-34; J. Lowenstamm, "Voyelles centrales, noyaux vides et statut de la longueur vocalique dans deux branches du sémitique", in G. Bohas, ed., *Développements récents en linguistique arabe et sémitique*, Damascus 1993, pp. 77-91.

other families (Afro-Asiatic, Indo-European ...).⁷ This is indicated by the few 'referential' elements it comprises and above all by the predominantly functorial and morphemic (non-lexical) series which complete it. Nowadays, these refer back to basic common grammatical structures which in principle remain beyond the reach of this lexicographical study. Their reduction to a lexical basis can be extremely precarious and hypothetical, apart from the natural connection with the pronoun system in the cases of verbal inflection and pronominal suffixation. We shall sketch only a simple and summary list of these monoconsonantal morphemes with morpho-syntactic function.

Starting with this phonologically simpler series and continuing with the biconsonantal (binary) series as a start will enable the transformations that have perhaps taken place in the lexematic configuration of the more complex series to be traced better.⁸ We can claim phonological simplicity to be a genetic principle of the language origin which remained fixed at this stage in the agglutinative and polysynthetic languages,⁹ whereas the inflected languages followed the course of 'complexity', creating phonological complex unities instead of 'combining' simple ones, as preferred by the other types of language. On the other hand, as pointed out above, we assume the postulate of initial 'consonantism' in Semitic,¹⁰ thus doing away with a possible inverse monoconsonantal series, partially introduced, by phonological reduction, in Akkadian, the only classic Semitic language that provides vowel-syllables.¹¹

Nor are we concerned in this study with the phonetical-graphemic analysis of the consonantal phonemes, but have simply adopted the results provided by general phonetics and Semitics in particular.¹² We presuppose the phonetical description of the signs/phonemes, here considered only from the phonological point of view. In this connection we favour a descriptive empirical terminology, avoiding as far as possible obsolete generic and approximate terms such as 'emphatic', 'guttural', 'sibilant', etc.

We are not concerned either with the graphemic or 'alphabetic' value of the phonemes, their names and so on, these being later cultural phenomena: 'letter'/character is an 'abstraction' and a secondary linguistic tool linked with the written symbolic fixation of phonemes. Finally, we do not consider their orthographical use as *matres lectiones* or as signs marking length. On the other hand, normal phonetic conditioned phenomena such as ellipsis, prothesis, alternation, metathesis and so on are taken into account, though they have very limited bearing on the phonological treatment of this series.

7. For a strenuous defence of the original 'triconsonantism' of the Semitic (verbal) 'root' cf. Voigt, *Die infirmen Verbaltypen, passim*; but cf. J. Macdonald, "New Thoughts on a Biliteral Origin for the Semitic Verb", *ALUOS* 5, 1963-1965, 63-85. For the previous *status quaestionis* cf. G. Conti, *Studi sul bilitterismo in semitico e in egiziano I. Il tema verbale N1212* (QuSem 9), Florence 1980, pp. 1-33.

8. Although the direction of the monosyllabic >< polysyllabic transformation is not linguistically clear; cf. Cl. Hagège, *La estructura de las lenguas* (Sp. version), Madrid 1987, p. 13.

9. On the basic phonological-lexematic contraposition between agglutinative and inflected languages cf. R.H. Robins, *Lingüística General. Estudio introductorio* (Sp. version), Madrid 1971, pp. 415ff. Butbit does not mean that the former were more 'primitive'; cf. in this connection the criticism by Voigt, *The infirmen Verbaltypen*, pp. 49f.

10. Cf. *supra* n. 4. This is an established postulate in Semitic grammar (cf. C. Brockelmann, *Grundriss der vergleichenden Grammatik der semitischen Sprachen*, I. Band, Berlin 1908 [repr. Hildesheim 1961], pp. 44ff.; S. Moscati *et al*, *An Introduction to the Comparative Grammar of the Semitic Languages*, Wiesbaden 1964, p. 64). The question is to ascertain to what extent this is a typical Semitic feature so that the pro-nuntiation of a 'glottal stop' (syllabic 'onset') before any isolated 'vowel' (pure 'rhyme') or inverse syllable is to be postulated. For syllabic consonanticity in Indo-European cf. Bomhard-Kerns, *The Nostratic Macrofamily*, pp. 109-111 ('Root Structure Patterning in Proto-Afroasiatic'). Of course, this rule "ceases to operate in languages which have lost pharyngeals, laryngeals (and velar fricatives and affricates)", as in Akkadian; cf. Diakonoff, *Proto-Afrasian and Old Akkadian*, p. 68.

11. Cf. W. von Soden, *Grundriss der akkadischen Grammatik, ... unter Mitarbeit von Werner R. Mayer* (AnOr 33), Rome 1995³, p. 28ff.

12. Cf. the studies quoted in n. 2.

As regards the notation of phonemes/graphemes, in order to avoid confusion, we have followed traditional usage among Semitists.¹³ Nevertheless, the order followed in the treatment of such phonemes will be strictly graphemic.

The 'etymological' treatment of this monosyllabic/monoconsonantal series will be carried out according to an outline of its semantic and morphemic functions. In any case, we do not intend to go beyond the empirical, verifiable level in search of the hypothetical reconstruction of an inaccessible and elusive proto-Semitic (pre-Semitic or ancient common Semitic). We shall use this label as a metalinguistic category, not as the description of an actual language. We shall proceed using the following sequence:

- unproductive series;
- referential series;
- functorial series:¹⁴
 - deictic functors,
 - adverbial (predicative expansions) functors,¹⁵
 - syntagmatic functors (the so-called prepositions, conjunctions),
 - suprasegmentally conditioned functors (the so called interjections).¹⁶
- morphemic series (in summary form).

The referential series, which provides 'Primärwörter/nomina', cannot be organised by 'semantic field' due to the scarcity of elements, i.e. only two possible nouns, both very dubious. In this connection, notice the absence of an empirically verifiable 'predicative' (verb) category in the whole monoconsonantal Semitic series.

In this connection, we shall pay attention to tracing the most likely referential origin of some significant functorial elements (always with great caution, as has been stated) and consequently also to its relationship to the referential series; in this way the basic range of referential monoconsonantal lexemes could be 'etymologically' widened. Starting from the point of view that 'designation' linguistically precedes 'functoriality', which is already a linguistic (grammatical) complication, priority would correspond to the 'adverbial' function, parallel to the 'adjectival'¹⁷ and as such descriptive also, as against the prepositional/conjunctive function, which normally belongs to the predicative syntagm.

In the morphemic series, although in a merely hypothetical and uncompromising way, we shall also consider the possible correlation of some systematic Semitic affirmative elements (prefixes, affixes, infixes) with the referential series.

As regards the unproductive or sterile series, we shall pay attention to the likely phonetic incompatibility of such phonemes/syllables (/C,/) within the Semitic phonological system as an incompatibility of the first degree, which will become evident in incompatibilities of the second (biconsonantal) and third (triconsonantal) degree. This last type is the best studied. In this connection we

13. For transcription we follow then the usage of the classic Semitic dictionaries (Von Soden, Leslau, Beeston et al., Hoftijzer-Jongeling), not of the Hamito-Semitic dictionary of Orel-Stolbova.

14. For the notion of 'functor' cf. A. Martinet, *Éléments de linguistique générale*, Paris 1967, pp. 111ff., 119, 143. It is also called an 'independent morpheme'; cf. F. Lázaro Carreter, *Diccionario de términos filológicos*, Madrid 1971, p. 283; D. Crystal, *A First Dictionary of Linguistics and Phonetics*, London 1980, p. 156; and *infra* n. 191. The category of 'particle' must be discarded; it is semantically void.

15. Cf. Martinet, *Éléments*, pp. 142f.

16. Cf. Martinet, *Éléments*, pp. 21; I. Lehisté, *Suprasegmentals*, Cambridge, MA 1970. This series appears largely as primary-onomatopoeic monosyllabic.

17. Cf. Martinet, *Éléments*, p. 142.

shall again carry out a brief and perfunctory appraisal, as a simple hypothesis to be developed later.

For checking and recording the different series we have made use of the standard lexical reference works for Semitics, resorting to contextual verification in cases of ambiguity.¹⁸

The unproductive series

Let us begin by providing the phonological table of the unproductive monoconsonantal series of proto-Semitic which we shall gloss later:

	voiced	voiceless	velarized	lateralized	sonant
interdental		t	ʈ, ɖʷ	ɖ[ɖʷ]	
dental (plosive)	d(?)		t, ɖʷ		
dental (fricative)	z(?)	s	ʂ	ʂʷ	r
velar (plosive)	g		q		
velar (fricative)	ḡ	ḥ			
pharyngeal	ʕ	ḥ			

At least half the 30/31 phonemes, ascertained as pertinent in the different phonetic tables of the classic Semitic languages, prove to be lexicographically unproductive as regards the shaping of monosyllabic lexical units (/C_v/). In this connection, the behaviour of the *dental, interdental, velar and pharyngeal* (voiced, voiceless, velarized¹⁹) classes singled out above stands out. It is extremely surprising to see the way

18. Cf. A.R. Bomhard, J.C. Kerns, *The Nostratic Family. A Study in Distant Linguistic Relationship* (= NF), Belin/New York 1994; J. Pokorny, *Indogermanisches etymologisches Wörterbuch*, I/II (= IEW), Bern/Stuttgart 1989²; V.E. Orel, O.V. Stolbova, *Hamito-Semitic Etymological Dictionary. Materials for a Reconstruction* (= HSED), Leiden 1995; R.O. Faulkner, *A Concise Dictionary of Middle Egyptian* (= CDME), Oxford 1981; D. Cohen et al., *Dictionnaire des racines sémitiques ou attestées dans les langues sémitiques* (= DRS), Paris/Leuven 1970-; W. von Soden, *Akkadisches Handwörterbuch*, I-III (= AHw), Wiesbaden 1965-1981; I. Gelb et al., *The Assyrian Dictionary of the Oriental Institute ...* (= CAD), Chicago 1956-; J. Hoftijzer, K. Jongeling, *Dictionary of the North-West Semitic Inscriptions, Part One/Two* (= DNWSI), Leiden 1995; J. Aistleitner, *Wörterbuch der ugaritischen Sprache* (= WUS), Berlin 1974⁴; C.H. Gordon, *Ugaritic Textbook* (= UT), Rome 1965; G. del Olmo Lete, J. Sanmartín, *Diccionario de la lengua ugarítica. Vol. I* (= DLU), Sabadell (Barcelona) 1996; L. Koehler, W. Baumgartner, *Hebräisches und Aramäisches Lexikon zum Alten Testament*, 4 Lief. (= HAL), Leiden 1967-1990; M. Jastrow, *A Dictionary of the Targumim ...* (= DTT), New York, NY 1950; M. Sokoloff, *A Dictionary of Jewish Palestinian Aramaic* (= DJPA), Bar Ilan 1990; K. Brockelmann, *Lexicon Syriacum* (= LS), Halle 1928 (repr. 1966); M. Payne-Smith, *Thesaurus Linguae Syriacae*, 2 vols. (= TLS), Oxford 1879-1901, (repr. 1981); E.S. Drower, R. Macuch, *A Mandaic Dictionary* (= MD), Oxford 1963; Ibn al-Manzūr, *Lisan al-ʿArab al-muḥīṭ* (= LA), Y. Ḥayyā, ed., Beirut 1988; E.W. Lane, *Arabic-English Lexicon*, 2 vols (= AEL), London 1863 (repr. 1984); R. Dozy, *Supplément aux dictionnaires arabes* (= SDA), 2 vols., Beyrouth 1881 (repr. 1991); A. de B. Kazimirski, *Dictionnaire arabe-français* (= DAF), 2 vols, Paris 1860 (repr. s./d.); M. Ullmann, ed., *Wörterbuch der klassischen arabischen Sprache* (= WKAS), Wiesbaden 1990-; H. Wehr, *A Dictionary of Modern Written Arabic* (= DMWA), Wiesbaden 1966²; A.F.L. Beeston et al., *Sabaic Dictionary* (= SD), Louvain-la-Neuve/Beyrouth 1982; J.C. Biella, *Dictionary of Old South Arabic. Sabaean Dialect* (= DOSA), Chico, CA 1982; W. Leslau, *Comparative Dictionary of Geʿez* (= CDG), Wiesbaden 1991²; E. Littmann, M. Höfner, *Wörterbuch der Tigrē Sprache* (= WTS), Wiesbaden 1962; Th. Leiper Kane, *Anharic-English Dictionary* (= AED), I/II, Wiesbaden 1990.. Almost all these lexical records are 'contextual'. Moreover concordances of Hebrew, Arabic, Syriac and Ethiopic classical texts and the indexes of some Akkadian text editions have been searched. - For other abbreviations cf. at the end of this article.

19. On the nature of the so called 'emphatic' and 'guttural' in Semitic cf. the studies quoted in n. 2; also J. Aro, "Pronunciation of the 'Emphatic' Consonants in Semitic Languages", *StOr* 47, 1977, 5-18; K. Tseretelli, "Glottalizovannye soglasnye v semitskich jazykach" [glottalized consonants in Semitic languages], *SemDz* 4, 1988, 85-90; J.J. McCarthy, "The

in which the last two series, thought to be characteristic of Semitic phonetics, behave. But this surprise becomes even greater when we notice, in the vertical columns, that the whole class of velarized/glottalized sounds (the so-called 'emphatics'), also characteristic of the Semitic languages, is lexicographically unproductive in the monoconsonantal series.²⁰

Such a situation can with difficulty be attributed to chance or to lack of information, since the list has been compiled taking into account all the lexicographical records of the classic Semitic languages. We must necessarily conclude to the essential syntagmatic (symphonic) character of these phonemes (velar, pharyngeal and pharyngealized) as an inductive, empirical *datum* going back perhaps to a 'law' in Semitic phonetics ("velar, pharyngeal and pharyngealized phonemes are phonologically 'incompatible', or better, unproductive as constituents of monoconsonantal lexemes in Semitic"; degree zero: incompatible by itself). Such an assessment is not in itself especially relevant, but this phonetic feature underlies and may explain different possible phenomena that such phonemes generate in the phonetic chains to which they belong, apart from being useful to determine the voiced / voiceless character of some phonemes, taking into account the structural phonetic distribution of the chart provided above.

An alternative hypothesis may suggest that this monoconsonantal series (functorial, morphemic and referential) goes back to a pre-Semitic layer from which it derives and in which the 'characteristic' phonemes of Semitic phonetics were not yet operative, being a later or simply an independent development.²¹ In fact, the clear foreign origin of lexemes which seem to go counter to the quoted law will reinforce the hypothesis that proto-Semitic lacked this kind of monoconsonantal unit. If it produced them with some phonemes but not with others, this can only be due to their peculiar character within its phonetic system, unless it is a general isogloss of any language.

In this connection, the behaviour shown by the dental and interdental series is more difficult to explain. Why, according to the classical view, is only the voiced fricative interdental /d/ productive of monoconsonantal lexemes in proto-Semitic? In some Semitic languages this phoneme appears as the isomorphic dental (plosive) voiced /d/ and (fricative) /z/, usually considered a transformation of the 'original' /d/. This view could be questioned, assuming instead a pluriform realisation of a proto-Semitic monoconsonantal voiced phoneme: /dental plosive/, /dental fricative/, /interdental fricative/, and taking those realisations as equally primitive. Historical phonetics seems indeed to argue in favour of taking them as transformations of the primitive voiced fricative interdental mentioned.²² But are they actually transformations or simply allophones/allographs? This could be a second phonetic 'law' of proto-Semitic ("the multi-realisation and interchangeability of proto-dental voiced phonemes in isolated position"), with

Phonetics and Phonology of Semitic Pharyngeals", in P.A. Keating, ed., *Phonological Structure and Phonetic Form. Papers in Laboratory Phonology III*, Cambridge 1994, pp. 191-233; L. Goldstein, "Possible Articulatory Bases for the Class of Guttural Consonants", *ibid.*, pp. 234-241; P. Zemánek, *The Origin of the Pharyngealization in Semitic*, Prague 1996.

20. Phonological research normally deals with bi- and triconsonantal segments; very few authors pay attention to the monoconsonantal series from the phonological point of view. For a general statement of the problem, leaving out of consideration particular studies on individual languages cf. for example K. Petráček, "Die Inkompatibilität in der semitischen Wurzel in Sicht der Informationstheorie", *RO* 27, 1964, 133-139; R.M. Voigt, "Inkompatibilitäten und Diskrepanzen in der Sprache und das erste phonologische Inkompatibilitätsgesetz des Semitischen", *WO* 12, 1981, 136-172. Also tangentially H. Jungraithmayr, "On Mono- and Triradicality in Early and Present-Day Chadic", in E. Volf, H. Meyer-Bahlburg, eds., *Studies in Chadic and Afroasiatic Linguistics*. (Papers from the International Colloquium on the Chadic Languages Family ...), Hamburg 1983, pp. 139-156.

21. On the other hand, the frequent 'abnormal' behaviour of this kind of phonemes may point in the same direction; cf. for instance, beside the general treatments on the Semitic phonology, A.G. Haudricourt, "La mutation des emphatiques en sémitique", *GLECS* 5, 1950, 49-50; R. Ruzička, "Quelques cas du ġ secondaire en arabe", *JA* 138, 1950, 269-318.

22. In this connection cf. the phonetic development in. Ug. (/d/ > /d/) and Aram. (* /d/ > /z/, /d/).

possible reflexes later on in opening position. This 'law' could in turn affect the etymological treatment of many Semitic clusters ('roots').

Nevertheless, a serious objection against such a hypothesis is the actual realisation of this phoneme as either three different articulations (/d/, /d/, /z/ in Ug., ESA, Ar.; but cf. Ug. and ESA where both the forms *d* and *d* coexist for the same lexeme) or two (/d/, /z/ elsewhere) in the Semitic languages in multi-literal lexemes. However, an answer can be put forward provisionally: on the one hand the realisation /d/ appears to be peculiar to Arabic, and on the other, the frequent interchange between /d/ and /z/ argues for their primitive interchangeability.²³ In any case, this interchangeability does not then prevent consolidation of a concrete articulation in the each language. The question must remain undecided for the time being. For other arguments see *infra* on functorial /d/.

Leaving this question aside, we have to analyse, nonetheless, some data which apparently run counter to the overall table of unproductive phonemes in the monoconsonantal series. We shall do this in summary fashion, referring to the later treatment of the binary (biconsonantal) series for proof.

Nevertheless, the fact that some of these apparent exceptions go back to lexemes with a second 'weak' phoneme (/':y:w:h/) poses the question of knowing whether we are dealing with a process of expansion of monoconsonantal lexemes (cf. *infra* at the end of this paper) by virtue of such phonemes or radicals, in the same way as happens with the expansion of the biconsonantal lexemes into triconsonantals, a seemingly undisputed datum. That will restore a more extensive monoconsonantal series (covering perhaps the whole phonetic spectrum). But in any case it would confirm the implied syntagmatic character of these phonemes which at first sight appear to be lexicographically unproductive of monoconsonantal lexemes. Or more generally, they confirm the innate tendency of Semitic lexicography to avoid monoconsonantism²⁴ by virtue of secondary expansions, in the same way that later on, or perhaps at the same time, it would tend towards trilateralism, which would eventually become its lexical characteristic.

In any case, since this is *a priori* a rather questionable hypothesis, to be verified only in a reductive manner by starting from the biconsonantal lexemes, and in order to proceed according to a sounder method, we prefer to defer judgment to the moment when comparative analysis of the binary lexemes allows us to decide on their phonological 'health' and original semantic value.

Let us now analyse the apparent exceptions to the table of *unproductive* monoconsonantal phonemes as set out above. We have some apparently monoconsonantal lexemes belonging to this table (/ʕ/, /d/, /g/, /q/, /s/, /z/, /z/) in various Semitic languages, which in fact they go back either to foreign loanwords or to transformations of biconsonantal Semitic lexemes. Other monoconsonantal lexemes and homographs will be dealt with in connection with the referential and functorial series.

*c "ruin": Heb. ʕ (HAL 771), Mb. ʕy (DNWSI 838); but pl. ʕyyîmʕyn points to a binary lexeme ʕ-w:y.²⁵

*d- I Normally this lexeme, *d*, *d*(y), with pronominal and functorial value (genitival attribution and

23. Cf. Ug. /drt/, Ar. /drt/, Hb. /zrt/; Ug. /d:ðrʕ/, Ar. /zrʕ/, Hb. /zrʕ/; with Amor. and Ebl. further complicating the question. A similar case is perhaps provided by the phonemes /p/, /f/ (?). It would be necessary, nonetheless, to carry out a close and complete scrutiny of all the 'roots' beginning with or containing /d/ and /z/.

24. According to Diakonoff, *Proto-Afraian and Old Akkadian*, p. 73: "neither is a root-morpheme of the type *CV allowed ... However ... a root morpheme of the pattern CS(onat) was possible".

25. Cf. HSED 248: *ʕw:y, "cry", by cause-effect semantic transformation (?).

conjunctive constructions;²⁶ cf. *infra*), attested in Ug. (*DLU* 124ff.), Aram. (*DJPA* 144), Syr. (*LS* 137, *ESA* (*SD* 34; *DOSA* 79),²⁷ etc.), is considered a transformation of an original /d/, on the basis of Ar. *du* (*AEL* 984f.) and the well proven isogloss /d/ > /z, d/.²⁸ But, as we said above, this view may be questioned from many quarters.

In fact, the coexistence of the forms /d/ and /d/ in so ancient a stratum as Ug. and ESA would allow us to suppose here an allophone, the opposition voiced/voiceless not being pertinent in this case; nor is it necessary to resort to a different primitive phoneme from which both forms would derive. Needless to say, the opposition /d/ # /d/ is operative in the biconsonantal and triconsonantal series (v. g. Ar. *dahaba* # *dahab*). On the other hand, the presence in Heb. (*HAL* 210) and Phoen. (*DNWSI* 596 [?]) of a form /d(y)/, /m+dy/, "what is enough", along with Heb. /z/ (< /d/) (cf. Aaram. /z/, Aram. /d/, /dy/; *DNWSI* 310ff.; *DRS* 201), seems to point in the same direction of positing a twofold original derivation/realisation: either presuming two originally different lexemes or again resorting in this case to a unique polyvalent lexeme with two realisations: /interdental-fricative :: dental plosive/ and with the same basic seme "property, possession, possessor of" > "what is owned by, sufficient". Otherwise we would have to assume that in the case of Heb. /d(y)/, /m-dy/, quoted above, the proto-Semitic isogloss /d/ > Heb. /z/ did not take place, unless in this case we have to assume a biconsonantal lexeme /d-y/, as the masoretic notation seems to suggest. But then the problem of the radical diffusion, mentioned before, would have to be considered.²⁹

In its turn, the rare Akk. (NAss.) functor /i:(an(a))-:d)da-t(i)/, "after, behind, afterwards" (*GAG* § 114m; *AHW* 165; *CAD D* 121f.), has the plain appearance of a Western loanword (Aram.?). In this language the corresponding series is represented by the phoneme /š/, which has converged with /d/, as has been postulated by some Ugaritologists, due to the special problems of textual interpretation in that language.³⁰

26. Cf. the respective grammars for its uses: W. von Soden, *Grundriss der akkadischen Grammatik* (= *GAG*), Roma 1995³; C.H. Gordon, *Ugaritic Textbook* (= *UT*), Roma 1965; D. Sivan, *A Grammar of the Ugaritic Language*, Leiden 1997; W. Gesenius, E. Kautsch, G. Bergsträsser, *Hebräische Grammatik* (= *HG*), Leipzig 1909²⁸/1918⁷ (repr. 1995); J. Friedrich, *Phönizisch-punische Grammatik* (= *PPG*), Roma 1951; R. Degen, *Altaramäische Grammatik der Inschriften des 10.-8. Jh v. Chr.* (= *AAG*), Wiesbaden 1969; G. Dalman, *Grammatik des jüdisch-palästinischen Aramäisch* (= *GJPA*), Leipzig 1905 (repr. 1960); Th. Nöldeke, *Kurzgefasste syrische Grammatik* (= *KSG*), Leipzig 1898 (repr. 1966); W. Wright, *A Grammar of the Arabic Language*³ (= *GAL*), Cambridge 1967 (Eng. version); M. Höffner, *Altisudarabische Grammatik* (= *ASG*), Leipzig 1943; A.F.L. Beeston, *Sabaic Grammar* (= *SG*), Manchester 1984; A. Dillmann, *Ethiopic Grammar* (= *EG*), London 1907 (Eng. version).

27. Cf. in this connexion IE *de-*, *do-* (*IEW* 181ff.: 'Demonstrativstamm'); but Nostratic **d'i:e* (*NM* 325), according to the current opinion.

28. Cf. Ch. Rabin, "La correspondance d Hébreu - d arabe", *Mélanges Cohen*, pp. 290-297. Would it be possible to suppose an inverse transformation: /z/ > /d/ > /d/ of which Heb. and Aram. would be archaizing witnesses? We assume in principle the usual table of phonetic correspondences/convergences/transformations among the different Semitic languages, as an established fact; cf. *supra* n. 2.

29. The same problem is present in the case of the encl.-emph. functor *di*, 'here it is', pronoun *de-*, 'whatever', in Tig. (along with the normative /z/ in Ethp. and Tig.; *DRS* 201]) and of modern SArab. (Jib.) *de*, /d-/ [*DRS* 201]. We would have here either another case of a twofold original derivation or of a transformation of the same phoneme /d/, according to the phonetic NW pattern and following the same functional model: nom. > pron. > functor of determination.

30. Cf. F. Renfroe, *Arabic-Ugaritic Lexical Studies* (*ALASP* 5), Münster 1992, pp. 99-102; the change could have taken place in Ugaritic itself according to W.R. Garr, "On Voicing and Devoicing in Ugaritic", *JNES* 45, 1986, 45-52; M. Smith, *The Ugaritic Baal Cycle. Volume I. Introduction with Text, Translation and Commentary of KTU 1.1-1.2*, Leiden 1994, pp. 38, 188; D. Sivan, *A Grammar of the Ugaritic Language*, p. 22.

All in all, we shall for the moment hold to the classical opinion that would see here a set of transformations from a unique monoconsonantal lexeme /d-/, attributing the exceptional anomalous and apparently contradictory derivations just quoted to analogical formations due mainly to external influence (Aramean or Cushitic *adstrata*), until there is better proof to confirm the hypothesis of the original (primitive) multiform realisation of this phonological cluster.

- *d- II "hand"; the existence of such a primitive Semitic lexema is most controversial and for the moment we cling to the classical derivation from a biconsonantal */y(a)d-/.³¹
- *g- I Ug. g, "voice" (*DLU* 142); < Sum. gù.³² It has no relation whatever with Heb.-Aram. /g-(-y)/ (< onomatopoeic animal cry; *HAL* 191; *DJPA* 134).³³ Its ostensible adverbial Heb. derivative *gam* (/g-m/), which supposedly passed to biblical Hebrew from Canaanite /g/, is highly dubious, as it is its (denominative) connection with Ethp. g^wēmā (*CDG* 193).³⁴
- *g- II Akk. gû < qû, "hemp" > "cord, string", "thread" (*AHW* 295, 924; *CAD Q* 285ff.); < Sum. gu, perhaps a *Primärwort*; cf. Heb. qaw (*HAL* 1010);³⁵ *infra* *q-.
- *g- III Ethp. ge, "territory" (*CDG* 174) < /g-(y-)/; cf. Heb. /g-y:/ (*HAL* 180f.; Ar. GN ġiwā').³⁶
- *-g Ethp. postpositive -g^wā (*CDG* 174), "also, certainly", emphatic functor, probably a labialisation of CS /-k/, as an allophone of Ethp. -ke (*CDG* 271) with the same value.³⁷
- *q- I Akk. qû I, "hemp", "cord": cf. *g-.
- *q- II Akk. qû II, "a vessel" > "a capacity and land (sowing) measure" (*AHW* 925; *CAD Q* 288ff.); technical term or *Kulturwort*, and so a possible semantic expansion ("cord" > "measure") of *q- I; definitely not a *Primärwort*.³⁸

31. Cf. ESA, Ug., yd, Akk. idu (< /yadu/), Ethp. 'ed (> /y:d/) (but cf. /). In accordance with the bi/tri-consonantal series of names for parts of the body in Hamito-Semitic (v. g. *HSED* 146f.); cf. P. Lacau, *Les noms des parties du corps en égyptien et en sémitique*, Paris 1970, pp. 11ff.; D. Cohen, "Berbère et couchitique. Notes comparatives sur des noms de parties du corps", in *Fs. Lestau*, vol. I pp. 225-233; Smith, *The Ugaritic Baal Cycle*, p. 322, n. 182. The possible monoconsonantal origin /d/, 'hand', is favoured by Eg. /d/; Ug. adv. /-d (cf. Ch. Rabin, "Hebrew d = 'Hand'", *JJS* VI 1955 111-115; G. Garbini, "Il corpo umano nella comparazione lessicale egitto-semitica", *RSO* 46, 1971, 136). But Eg. is highly reductive, especially in the case of 'weak' phonemes; cf. G. Conti, *Studi sul bilitterismo*, p. 12.

32. Cf. Albright, *JBL* 60 1941 207f.; J.-L. Cunchillos, *Estudio del Salmo 29. Canto al Dios de la fertilidad-fecundidad* ... (Institución San Jerónimo 6), Valencia 1976, pp. 204ff.: Sum. gù. For a possible Hamito-Semitic etymon cf. Watson, *SEL* 13, 1996, 122.

33. Cf. *WUS* 63; in this connection also *DRS* 92 and 163.

34. Cf. Dahood, "Textual Problems in Isaiah", *CBQ* 22, 1960, 402; id., *Ugaritic Lexicography*, in *Mélanges Tisserant*, Vol. I, pp. 86, 100; *CDG* 193; *DRS* 92.

35. Metonymy from material to object, a normal pattern of semantic derivation.

36. Cf. M. Cohen, "gyě, ge, etc. 'vallé, pays'", *GLECS* 1, 1933, 34. Perhaps connected also with /g-w(-w)/ 'interior part', Ar. ġaww (*AEL* 478f.); Aram. gw (*DJPA* 121); Syr. ġawō (*LS* 107); Mand. ġawalgu (*MD* 74, 81).

37. Cf. J. Cantineau, "A propos des sons g, k, q dans les langues sémitiques" [Résumé], *BSL* 46, 1950, 25-27. This sounds better than postulating a derivation from Ug./Sum. g/gu quoted above.

38. Cf. Salonen *HAM* 2 270/2, 293/7. Also metonymy from container to contents, another pattern of semantic expansion.

- *q- III Akk. *qû* III, "copper, bronze" (CAD Q 291): 'it is possible that the *qû* B "vessel" is metonymically derived from C "copper", "bronze".
- *s- I/II/III Akk. *sû* I/II/III, "stone"/"mat"/"palm fibre" (AHw 1052, 1535: *zu*; CAD S 337f.) of foreign (Sum.-Hurr. [?]) origin; they look more or less like technical, cultural words, unknown in other Semitic languages.
- *s- IV Ethp. *say*, "alas!" (CDG 521) and Syr. *sah*, "cave!" (SL 461), go back to a functorial biconsonantal lexeme (interj.) of onomatopoeic origin /s-:y/, reflected in Akk. *sâ'um*, "to cry" (AHw 1033; CAD S 202).
- *-s- Ethp. *-ssa-*, *-so* "but", "now!" (CDG 480), postpositive, emphatic functors perhaps derived from the Semitic functorial/pronominal /š/ (cf. *infra*). A Cushitic origin cannot be ruled out either.³⁹
- *š- I Heb. *šî*, "boat, ship" (HAL 956) < /š-y/; cf. Eg. /ḏ3i/ (CDME 318: "ferry someone across the water"); apparently a biconsonantal *Kulturwort*.
- *š- II Heb. *šî* "a (desert) animal/demon" (HAL 956; pl. *šiyyim*) < /š-w-y/; cf. Ar. /š-w-y/, "to become dry" (AEL 1751); Akk. *šua'u*, "trocknen" (AHw 1107); related to Heb. *šiyyāh*, "desert" (HAL 957f.).
- *z- I Akk. *zû* "excrement", "refuse" (AHw 1535; CAD Z 150f.; E 432: *êzû*, *têzû*) < /-(w-)š-/; anomalous phonetic derivation; Ar. /w-š-/ (AEL 2944); cf. Ug. *zu* (WUS 271); Heb. *še'*, *šē'āh*, *šō'āh* (?) (HAL 931); Ethp. /š(-y)-/, *šē'a*, *dē'a* (CDG 567); Syr. *šiy* (LS 619).
- *z- II Heb. *zeh*, *zō(h)*, *zû* (HAL 253ff.); Aram.-Phoen. *z*, *zy* (DNWSI 299f., 310ff.); ESA *z* (SD 169; DOSA 157); Ethp. *za* (CDG 629) < ḏ; or perhaps an original allophone /ḏ:d:z/, voiced (inter-)dental; cf. in this regard Eg. *z*, "man" (CDME 205). Cf. *supra* on *d- I and *infra* on *ḏ-.

The referential series

This series provides only two lexemes, which are well attested in all the Semitic families and may be considered as *Primärwörter/nomina*:

- *p-(m-) "mouth":⁴⁰ Akk. *pû* (AHw 872ff.); Ug. *p* (WUS 251f.; UT 465); Kan. *pû* (GAGI 259: in PNN; Rainey III:53); Heb., Phoen., Pun. *py* (DNWSI 909); Heb. *peh* (HAL 486ff.); Syr. *pûmō* (LS 577); Ar. *fam*, cstr. *fû*, *fî-* (AEL 2446; DMWA 728); ESA *f*, "voice"/"command" (SD 43; DOSA 399); for Ebl. vd. /bù/, Krebernik PET 78; cf. SAGxIGI = *pû-wu*, VE 267.⁴¹

Apparent homograph:

Akk. *pû*, *pâ'um* "husk", "straw" (Sp. "granza") (AHw 874); < Sum. loanword, (>?) *bubbu*. It

39. Cf. in this regard Gur. *-š* (CDG 480). But EG § 62.2: "the primordial Demonstrative *ta* has been softened into *da*; and then, through transformation of the Mute into the Sibilant, the two further modes of expression *sa* and *za* have been evolved"(!).

40. Cf. HS *fo(') (HSED 185); Diakonoff *et al.*, "Historical Comparative Vocabulary of Afrasian", *SPJAS* 2, 1993, 28 (*f8 > *fw/y/'h).

41. But cf. Pettinato *Bilinguismo* 47: "è certo *pû* nel senso dell'ebraico o dell'accadico *pûtu* 'fronte'".

appears to be a biconsonantal *Kulturwort*.

For the element /p-/ of the functorial series cf. *infra*.

*š-(:y-):⁴² Akk. *šû*, *šû'u* (AHw 1255; CAD Š 417); Ug., Phoen. *š* (WUS 298; UT 486; DNWSI 1089); Heb. *šeh* (HAL 1221f.); Aaram *š'h/t*, pl. *š'n* (DNWSI 1094f.); Ar. *ša'*, pl. *šiwāh*, *šiyāh* (AEL 1623ff.; DMWA 449).

For other apparent monoconsonantal homographs cf. the functorial series.

However, there are some phonological vestiges which suggest that these two lexemes were not originally monoconsonantal. In the case of /p-/, this current realisation is the result of a reduction, favoured by the 'weak' nature of the second radical, possibly a nasalized bilabial stop with onomatopoeic connotation (cf. Eng. "m...outh"); furthermore, the alternation/change /w:m/ is well attested in Semitic phonetics. Notice the possible 'canonical' form both in Syr. and Ar. /p-m/, which Ebl. /pù-wu/ would corroborate (together with the reduction /bù/!),⁴³ insofar as this testimony is valid. In its turn, the lengthening of Akk. *pû*⁴⁴ would be precisely the proof, the missing link of such a reduction /palatalisation: /pum:wu/ > /pû/ > /pu/, later to become consolidated in the North-West Semitic /Canaanite form /p/, while Syr.-Ar. /pm/, /ph/ would remain as an archaic, fossilized form; the alternative construct form *fû* would result from the NWS realisation quoted. The contrary opinion would consider /-m/ as an enclitic expansion not easily explained in Ar. and Syr.⁴⁵

The case of /š-/ is more ambiguous, but here other forms, such as Ar. *šāt*, *šāhar*⁴⁶ and Akk. *šû'u*, besides Aaram *š'h/t* (DNWSI 1094s), also suggest the reduction of a binary lexeme of the type /š-w':h/ or the like, through a process of palatalization of the final 'sonant'.

If these reductions are correct, the result would be that ancient Semitic had no referential monoconsonantal series, in other words, that no original monoconsonantal Semitic nouns ever existed.⁴⁷ In this connection it is interesting to note Brockelmann's attitude, which is to ignore monoconsonantals, as against other treatments of Comparative Semitics that maintain them.⁴⁸ We would then have only the functorial series⁴⁹ as a testimony of the primitive monoconsonantal Semitic layer.⁵⁰

42. Cf. Nostratic *r[ʰ]a:eh̄ (NM 379); HS *ša' (HSED 121f.).

43. Cf. J. Sanmartín, "Isoglosas morfológicas eblaitico-ugaríticas: la trampa lexicográfica", *AuOr* 9, 1991, 200-201 (the theme: *pus*); cf. also the rare Ar. *fūh*, "mouth" (AEL, pp. 2464ff.). For its (mono-bi)consonantal nature cf. Conti, *Studi sul bilitterismo*, p. 112 n. 5, and many other studies.

44. Even if the recording of vowel length is ambiguous in Akkadian.

45. Cf. already the lexicographical discussion in AEL, p. 2464f.

46. Cf. Diakonoff, *Proto-Afrasian and Old Akkadian*, p. 76; Conti, *Studi sul bilitterismo*, p. 13, n. 5. Also the apparent allophone Ug. *tat* (WUS 329f.; UT 500); Ar. *tā'awat* (DAF 215); Aaram. *t't*, 'sheep' (DNWSI 1095); cf. G. Del Olmo Lete, "Sheep and goats at Ugarit", *BSA* 7, 1993, 188. *Infra* /t/ in the functorial series.

47. It also means that Jungraithmayr's opinion about mono- and biradicals in Chadic being the product of a reduction of original triradical lexemes is to some extent valid for Semitic as well; cf. H. Jungraithmayr, *Was ist «primitive»? zur Stand der Sprachgeschichtsforschung in Afrika* (SWGJWGU, 23), Stuttgart 1987. On the contrary, cf. F. Delitzsch's, *Studien über indogermanisch-semitische Wurzelverwandschaft*, Leipzig 1873, now outdated, who finds some original mono-radicals expanded to bi- and trilateral weak 'roots'; cf. Voigt, *Die infirmen Verbaltypen*, 49.

48. Cf. Brockelmann, *Grundriss der vergleichenden Grammatik I*, pp. 285ff., 331ff., who does not take into account this series when dealing with 'primitive' Semitic morphology. On the contrary cf. Moscati, *Comparative Grammar*, p. 83, who quotes the three examples /p, š, g/, apparently assuming that many others exist. D. Sivan, *A Grammar of the Ugaritic Language* (HdO I, 28), Leiden 1997, p. 62, records the three same lexemes, but suggests: *š* [šû] (< šayu?); *p* [pû] (< piyu?). On the other hand, R.B. Coote, "Ugaritic *ph(y)*, 'see'", *UF* 6, 1974, 1-5, puts forward the hypothesis of the basis *ph(y)* being an expansion of monoconsonantal *p* (!).

49. The pronominal series is a special case of transformation of the functorial one; cf. G. del Olmo Lete, "The Semitic Personal Pronouns. A Preliminary Etymological Approach" (forthcoming).

The Functorial Series

The notion of 'functor' belongs to the metalinguistic level in as much as it implies the use of a lexeme that 'functions' as a marker of relationship between other lexemes.⁵¹ Only in this sense does it have a 'referential' meaning, sometimes very distant from its original etymon. Functors are thus a special lexical class, not only because of their peculiar, non-referential semantic value (linked to the performance of a syntagmatic 'function'), but also because of their multiple onomatopoeic origin; in any case, they are strongly lexicalized.

This designation seems more suitable than the meaningless term 'particle'. Properly speaking, only the 'prepositions' and 'conjunctions' of classical grammar are functors, while adverbs have multiple, full, independent (nominal/adjectival) semantic content, and interjections (exclamatory 'words') are primitive onomatopoeic monemes with suprasegmental value. We should thus distinguish two different kinds of 'functors'. First, onomatopoeic (exclamative) functors,⁵² beginning either with a *hamza*/glottal stop and going back to the most primitive, non-modulated layer of language, or with a semivowel sound. Second, 'denotative functors', belonging to the most primitive group of 'nouns'⁵³ (as is evident, for instance, in /d/).

On the other hand, the so-called 'emphatic, enclitic or deictic particles' are not always easily distributed among the grammatical categories quoted above and are better considered as actual full 'functors'.⁵⁴ For the sake of lexicographical simplification we shall place all these categories under the same heading, while still bearing in mind the functional and semantic distinctions mentioned above.

It may also be instructive in this case to provide a phonological table of this series:

	voiced	voiceless	sonant	semivowel
bilabial	b	p	m	w
interdental	[z]		n	
dental (plos.)	[d]	t	l	
palato-alveolar		ʃ		y
velar		k		
laryngeal		h		

It is possible to conclude from this distribution that the original monoconsonantal Semitic stock is formed from sound, 'strong' or, better said, clear-cut articulated phonemes, as a sign of belonging to a very

50. On the other hand /p/ and /s/ turn out to be two rather troublesome phonemes in Semitics: cf. their realisation in Northwest Semitic as against Ar.-Ethp.

51. Cf. *supra* n. 14 on the linguistic meaning of function/functor.

52. On 'onomatopoeia' cf. S. Ullmann, *Semantics: An Introduction to the Science of Meaning*, Oxford 1962, pp. 82-92.

53. As we said above, there are no original 'predicative/verbal' monoconsonantal monemes. I do not know whether this point has some bearing on the polemic about verb/noun priority in language; cf. Hagège, *La estructura de las lenguas*, p. 90; F. Pennacchietti, "Appunti per una storia comparata dei sistemi preposizionali semitici", *AION* 34, 1974, 161-208. Abundant comparative material will be found in the dictionaries (cf. *supra* n. 18) and grammars (cf. *supra* n. 25) quoted above, an also in the works of J. Barth (*The Pronominalbildung in den semitischen Sprachen* [Leipzig 1913]; *Die Nominalbildung in den semitischen Sprachen* [Leipzig 1894²] and K. Aartun (*Die Partikeln des Ugaritischen*, I-II (AOAT 21), Kevelaer/Neukirchen-Vluyn 1974/1978).

54. Cf. for a complete functorial and morphemic *elenchus* in Northwest Semitic, cf. Aartun, *Die Partikeln des ugaritischen* 1/2. See also C. Goddard, "Particles and Illocutionary Semantics", *Papers in Linguistics* 12/1-2, 1979, 185-229. Cf., too, the 'meta-predicates' in C. Goddard, A. Wierzbicka, *Semantic and Lexical Universals. Theory and Empirical Findings*, Amsterdam/Philadelphia 1994, pp. 43ff., 476ff..

primitive layer, which it shares with other linguistic families, Egyptian, Afro-Asiatic and Indo-European, where they also appear. Such a 'monemic' and phonetically 'resistant' structure would be characteristic of the series. They mostly exhibit a voiceless realization.

On the other hand, the Semitic languages, like other linguistic families, show clearly that 'function' is independent of the 'position' taken by functors in the syntagm. Thus we have pre- and postpositive functors, sometimes alternating in the different languages. A clear-cut example is the position taken by the functorial 'article' in Canaanite-Arabic *versus* Aramaic. But this is by no means the only case. Some languages, Ethiopic for instance,⁵⁵ tend to use postpositive functors. We must also be prepared to concede their existence in other languages.

An alphabetic list of this series is provided here:

*'a- A) Multiple independent *prepositive* functor.⁵⁶

a) Multiple intensifier (interj.) with exclamative, admirative, emphatic, vocative, suprasegmental semantic value; "oh!, ho!"; cf. Ar. 'a (GAL I 294, II 85ff.: 'alifu-l-nidā'; AEL 3: dialectal postpositive also "in a case of pausing at the end of a verb"); > cf. comp. Ar. 'ā-lā, 'ā-mā, 'ā-hi, 'ā-han (DMWA 1, 32, 36); Ethp. 'o (EG 114f.; CDG 1: "occasionally prefixed and suffixed").

b) Interrogative intensifier (interj./adv.), introducing the suprasegmental interrogative tone in Ar., as a derivative from the former function and used in simple or disjunctive interrogation (Lat. *num*); cf. Ar. 'a (GAL I 282, II 306ff.; AEL 2f.: 'alifu-l-istifhām); > cf. comp. Ar. 'am (< /'a-m(a)/) and interrog. functors 'ā-wa, 'ā-lā, 'ā-mā (DMWR 1).

On the other hand, forms such as Ar. 'al- (art.),⁵⁷ *hal* (inter.) represent possible syntagms of independent emphatic-deictic, alternative elements: < /'ha-l(a)/ [?]; cf. *infra* **ha* and **la*. Possibly the CS affirmative-explicative/disjunctive /'a+w(a)/ > /'aw/ > 'ō, "or", universal, simple disjunction also derives from *'a; cf. *infra* 'ō. The Bs. seems to develop in this way: exclamation > interrogation > disjunction.

*-'a B) Multiple *postpositive* (enclitic) functor:

a) Explicative intensifier: "so!"; cf. Ethp. quotation + /-'a/ (EG 382; CDG 1; also 'o-'a; cumulative, exclamative, emphatic function; cf. A,1).⁵⁸

b) Determinative, deictic intensifier (art.): "the"; cf. Aram. -(')a (AAG 54).⁵⁹ This element also occurs at the beginning of the 1st. p. pron. /an-'a/ and the like;⁶⁰ on the other hand there is still

55. Cf. Dillmann, *Ethiopic Grammar*, pp. 420ff.; Bergsträsser, *Introduction to the Semitic Languages*, p. 127.

56. Cf. Barth, *Die Pronominalbildung*, pp. 74ff. For the different graphemic uses of the *alif* in Ar. and Heb. cf. AEL 1ff.; HAL 1ff.

57. Cf. E. Ullendorff, "The Form of the Definite Article in Arabic and Other Semitic Languages", in *Fs. Gibb*, pp. 631-637, maintains that in this case the *lam* (called by the Arab grammarians *lam al-ta'rif*) results from the dissimilation of the initial gemminated consonant; cf. in the same direction T.O. Lambdin, "The Juntural Origin of the Semitic Definite Article", in *Fs. Albright*, pp. 315-333.

58. By analogy with other phenomena of generalised final vowel accretion in Ethp.; cf. /-n-e/, /-e/, a directional element (CDG 380; EG 375ff.) - In the case of pron. suf. *zi'a*, /-'a/ must be considered as an illative [< accusative] vowel, rather than a Cush. element /-'a/ (cf. EG 432; CDG 630; improbable mixture; EG); vd. /d-/, *infra* n. 80.

59. This functor is apparently an Aram. loan in LB; cf. AHw 2. - The question remains as to whether the Aram. 'article' (*status determinatus*) is originally a final, modal apophony rather than a functorial morphemic accretion; cf. K. Aartun, "Zur Frage des bestimmten Artikels im Aramäischen", *Acta Orientalia* 24 (1959) 5-14.

60. Cf. G. del Olmo Lete, "The Semitic Personal Pronouns ..." (forthcoming).

the question of /a/ in Paleo-Akkadian and the adv. ending /-â/ (GAG § 63g; AHw 2).⁶¹

Apparent homographs:

Akk. *â* I, *ê* I, *ai*, "(do) not" (AHw 23, 180; CAD A/1 218ff.: *aj*); cf. *infra* **i*.

Akk. *â* II, *ai* II, III, *ayyi*, *a'û*, *û'a*, "alas!" (AHw 23, 88; CAD A/1 220f.: *u'a aja*; cf. CDG 623); <(?) *ayy(-u)*; cf. *infra* **wa* and the biconsonantal series */-y(-y)/.

The origin of this functor is very probably onomatopoeic (glottalized anterior open vowel) with the semantic shift: exclamation > interrogation > disjunction > determination (Primitive Semantic Universals). In any case, the exclamative seme must be considered as original in this phoneme-functor with a natural universal semantic value.

- **i*-
- A) Intensifier functor of affirmation / exclamation (possible apophony of A,1): "yes, yea!"; cf. Akk. *î*, cohortative functor with pret. 1 p.pl. (GAG § 81g; AHw 363; CAD I/J 1: *i nillik*⁶²); Heb. *î* (HG § 105.1; HAL 37; Ar. *î*, used normally in oaths (GAL I 285; AEL 131f.:⁶³ *î wa'allāh*); present maybe in the comp. forms *îhi*, *îha*, *îhin* (DMWA 38); Syr. *îw* < /i-wa/ (?) (LS 14). Also Ug. *î* (PU 1 76; DLU 1) may be quoted as emphatic functor; from which maybe (?) also comp. Ug. *i-k(y)*, Heb., Aram. *'êk* < /i+k(a)/, unless it comes from < /-y/, as usually presumed.⁶⁴
- B) Intensifier functor of simple, indicative and prohibitive negation, preposed to nouns and verbs, alone, repeated or in conjunction with other negative functors, with other derived functions: "no", "not"; Ethp. *'i-* (EG 380; CDG 1; for its many functions); Akk. *â* I, *ê* I, *ai*, "(do) not" (GAG § 81i-j; AHw 23, 180; CAD A/1 218ff.: *aj*); Phoen. *ÿ* (PPG § 248.1; DNWSI 43f.); cf. also Ar. *'in*, "not" (GAL I 284); < /i + n/(?). Its existence in Heb. and Phoen. is uncertain; in Ug. this functor apparently does not exist.⁶⁵ Its etymological correlation (by /-n/ expansion) with Ug. *in*, Heb. *'ên*, Mb. *'n* (< /-y/) cannot be determined.⁶⁶ Also debatable is its connexion with conditional functor Heb. *'im*, Ar. *'in*, Akk. *êm(a)* (cf. Ug. *hm*) as a comp. expansion < /i+m:n/.⁶⁷

It originated perhaps from /a/ by semantic and apophonic opposition, starting from the 'neutrality' of its onomatopoeic-exclamative-interrogative origin. The suprasegmental element may be discriminant in this regard.⁶⁸ But a derivation by contraction from biconsonantal /-y/ (also ultimately of onomatopoeic

61. Cf. I.J. Gelb, *Old Akkadian Writing and Grammar*, Chicago, IL 1952, pp. 141f.; id., "La lingua degli amoriti", *RANL* 8/13, 1958, 154; also Ch. Kramalkov, "The Amorite enclitic particle *a/i", *JSS* 14, 1969, 597ff.

62. Or perhaps < "no ...?"; cf. also Akk. *ai* II. On this universal phenomenon (negative interr. > assertion) cf. E. Wagner, "Der Übergang von Fragwörter zu Negationen in den semitischen Sprachen", *MIO* 10, 1964, 261-274; G.R. Driver, "Affirmative by Exclamatory Negation", *JANES* 5, 1973, 107-114.

63. Its connection with the base /-y(-y)/ is to be excluded. On the other hand, AEL 130 points to the allophone *hî*.

64. Cf. M. Dietrich, O. Loretz, *UF* 26, 1994, 70; *PU* 1 7ff.; *DLU* 1, 20, 22. Dubious equivalences are: Heb. /i/ IV, "alas!" (?) (HAL 37); Aram. *ÿ* (GJPA § 56; DDT 43); Syr. *ÿ* (LS 14); of probable onomatopoeic origin (cf. /a/ A,a) or to be derived also from biliteral /-y/.

65. Against the etymology proposed by Aistleitner and Leslau for Ug. *i* I and Von Soden for Akk. *â* II, *ai* II / III < /ê/ < /-y/.

66. Cf. *PU* 1 19ff. (< /-y/); cf. Akk. *yānu*, etc.

67. Cf. M.M. Bravman, "The West-Semitic Conditional Conjunction 'im, 'in and Some Related Particles of Arabic and Akkadian", *Muséon* 83, 1970, 241-248.

68. Cf. Spanish "¡e!" (admonition as well as negation), "¡a!" (functor of admiration and recognition as well), "¡o!" (exclamative and vocative); "¿ah, sí?" = "¡sí!" / "¡no!", according to (suprasegmental) intonation. Cf. Cl. Hagège, *La estructura*, pp. 34ff.; I. Guidi, "Particelle interrogative e negative nelle lingue semitiche", in *Fs. Browne*, pp. 175-178; E. Wagner, "Der

origin) cannot be ruled out, taking into account the semantic shift affirmation/negation, as well.

Apparent homographs:

Heb. 'î, "isle" (HAL 37); Ug. i[hit] (DLU 16); for Pun. 'y, vd. DNWSI 43); < *w/y; cf. in this connection pl. Heb. 'iyyîm / Ug. iht; perhaps a biconsonantal loanword or *Kulturwort*; cf. Eg. kw (CDME 12).

Heb. 'î, "jackal" (HAL 37); < *w/y; biconsonantal *Primärwort* of AA origin; cf. Eg. kw, "dog" (CDME 12; HSED 31).

*u- (> 'ô) Multiple, *prepositive*, exclamative, vocative intensifying functor, expressing admiration, surprise, pain ...: "oh!"; cf. Ethp. 'o (EG 319; CDG 1), also *postpositive* or both together; in comp. 'o'a; Syr. 'ô (GS § 62; LS 7); it could be also present in alternative comp. forms: Ar. 'awwah, 'uwwâhi, "oh!" (DMWA 36) [< /a:u(w)+wa+ h(a)/i/]: "oh, and look!"] and parallel to the Heb.-Aram. and Ethp. comp. biliteral forms /ôy/ (HAL 29; CDG 623); < /wa-ya/, cf. *infra* *w-.

It would be considered then a natural, universal onomatopoeia as a variant or allophone (not the transformation /a/ > /o/) of /a/, or better of */u/.⁶⁹ But a derivation by way of contraction from /wa/ cannot be ruled out (cf. *infra*), in view of the secondary nature of the vowel phoneme /o/ in Semitic [?].⁷⁰

Apparent homograph:

Heb. 'ô, "or" (HAL 19), disjunctive functor; Heb.-Sam. 'û; Ug. 'u; Akk. (')û, as against Ar. 'aw; Syr. 'aw; ESA 'w; Ethp. 'aw (DRS 11); it must be considered binary or biconsonantal in origin, the result of a phonetic reduction: /a+w(a)/ > /aw/ > /ô/, /(')û/; simple, universal disjunctive (cf. *supra* *'a; *infra* *wa).

*b- Multi-relational,⁷¹ prepositional / conjunctive functor, in space (multidirectional: "in", "from"), time, causality, condition, exchange, company, instrument, manner, *b essentiae*,⁷² etc., according to a multiple semantic shift: /b/, "in, at, by, with, between, as, ..."; CS., except Akk.; for Ebl. cf. BA [bi/ba], /bi:a/;⁷³ Ug. b, by (m.l.) (UT § 10.1-2, 4-5; PU 2 1ff.; DLU 97ff.); Heb. b(-) (HG § 102.2; HAL 100ff.);⁷⁴ Phoen. b (PPG § 254.a; DNWSI 137ff.);⁷⁵ Aram. b (AAG § 45; GJPA § 47.1; DJPA 83); Syr. b (SG § 156; LS 56); Mand. b(-) (MD 44); Ar. bi (GAL I 279, II 156ff.; AEL 141ff., for

Übergang von Fragewörtern zu Negationen in den semitischen Sprache", MIO 10, 1964, 261-274; A. Farber, "The Diachronic Relationship between Negative and Interrogative Markers in Semitic", Fs. Leslau, vol. I, pp. 411-429; M. Brown, "Is it not?" of 'Indeed!': HL in Northwest Semitic", Maarav 4, 1987, 201-219; D. Sivan, W. Schniedewind, "Letting your 'yes' be 'not' in Ancient Israel: A Study of the Asseverative lô' and hâlô'", JSS 38, 1993, 209-226.

69. Rounded vowel; all the monoconsonantal hamzas are exclamations; or conversely, the exclamative functors are all hamzaneized / glottalized (/':h/ [?]: cf. /ha/]. For the ways of expressing the 'vocative' in the various Semitic languages cf. GVGSS II § 19.

70. On the development of the Semitic vowel system cf. Diakonoff, Proto-Afrasian and Old Akkadian, p. 98ff.; but see *supra* nn. 5-6.

71. Cf. in general GVGSS II §§ 236ff.; DRS 39f.

72. On this point cf. L.N. Manross, "Bêth Essentiae", JBL 73, 1954, 238-239; H.-P. Müller, "Das Beth existentiae im Althebräischen", Fs. Von Soden (AOAT 240), pp. 361ff.; C.H. Gordon, "In of predication or equivalence", JBL 100, 1981, 612f.

73. Cf. ARET 2 120; ARET 5 61; J. Sanmartín, "Isoglosas morfológicas eblaítico-ugaríticas: la trampa lexicográfica", AuOr 9, 1991, 180f.

74. Cf. N.M. Sarna, "The Interchange of the Prepositions beth and min in Biblical Hebrew", JBL 78, 1969, 310-316.

75. Cf. P. Swiggers, "Phoenician b 'from'?", AuOr 5, 1987, 152-54.

the different functorial uses); ESA *b* (SG § 31.1; SD 24; DOSA 33f.); Ethp. *ba* (EG § 164.1; CDG 82, different uses, among them distributive *baba*); with extended by-forms in different NWS languages: /bn/, /bm/; and in composition with pronominal suf. and other functors, v. g.: Ar. *bi-lā*, *bi-mā* ... (DMWA 38); Ethp. *ba-hu*, *ba-nu*, in inter. use (CDG 82); and in syntagmatic comp. with nouns, e. g., Ug. *b-qrb*, *b-tk*, etc.;⁷⁶ and suf. Heb. *bī*, "I pray!" (HAL 117) [< "on to me ...!", or "by me!"?], derivative use.

Cf. in particular the verbal-substantive value: Ethp. *bo*, *bottu*, "he has", "there is" [< /ba+suf. 3^a p. s.⁷⁷]; and the comp. 'albo, "there is not"; *bo+za*, "someone, something"; *bo+ama*, "sometimes", etc (EG 407f.; CDG 82). Cf. in this connection Akk. *bāšu(m)* (AHw 112): 'vor-akk. **ba-šu* "in ihm"?' [< /**ba* + pron. 3^a p. s., -*šu*/], "to be";⁷⁸ also Ar. *bi* (DMWA 38), as a copula after negation, a derivative syntactic use.

This verbal-nominal use and its combination with pronominal suffixes make this lexeme formally and functionally a 'noun', perhaps originally /b_v/, with the Bs. of "presence, situation of something in a place" > "place of" > "where" > "here" > "in" (Semantic Universal);⁷⁹ cf. Eg. *b*, *bw*, "place" (CDME 77, 81f.). The vocalization /ba/, /bi/ may respond to its 'grammatical' function as a complement of place (locative) and indirect (const.) use (> "something of the place of" > "something in"), or be due to simple illative apophonies.⁸⁰ In this connection its relation, phonological (voiced, voiceless) and semantic, with **p*- (homorganic articulation; cf. *infra*) must be kept in mind.

As for the possible expansions of /b/ in biconsonantal 'roots', the question is too hypothetical and there is no actual semantic control starting from the suggested Bs.: e.g. /b/ > /b(y)n/⁸¹ > /bny/; /b/ > /bh:/ > /bhl/ ...; /b/ > /b(w)/. "Situation" is too generic a Primitive Universal in this regard. The suggested etymological relation /bayt/ < /b-t/⁸² is beyond any reasonable linguistic check.

Apparent homographs, probably loanwords:

Akk. *bā*, "water" (AHw 93; CAD B 1: "foreign word"); < unknown.

Mand. *ba*, unknown specific ritual value (DRS 40: Eg. *b'* (?))

**d*- Multiple determinative functor with numerous functional expansions: pronominal- demonstrative, relative, genitival, conjunctival, emphatic.⁸³ NWS /d/ > /z, d/: "the owner of" > "that of"; Ar.

76. Cf. Dahood RSP I 133-141; III 40.

77. Cf. dialectal Ar. *fī*, *mafī*, with the same morpho-syntactic structure.

78. Cf. for other examples DRS 39: modern S.Ar. /bû/, etc.; Soq. *biši* < /ba+š-/ # Ar. *la(y)š-* < /la+š-(')/ [/la+'i:š:t/?]. But cf. Diakonoff, *Proto-Afraisan and Old Akkadian*, 15.

79. Cf. Goddard-Wierzbicka, *Semantic and Lexical Universals* 41, 43 [conjunctions and particles: "the same"; 45f: "when, where" ...; Universals: "localization [b], pertinence [l], comparison [k]"; better than the meaning "contigüité" > "avec, en échange de ..."]; cf. DRS 39f. As is known, original / primitive monemes have generic(?) semantic value (?), a kind of first abstraction/indetermination: a characteristic shared by the so-called "primitive language" and the linguistic Universals.

80. In this connection, an analogy with *li* and *fī* must be at work in Ar. *bi* [cf. Ug.]. Also the different vocalizations of Heb. /b/ must be taken into account.

81. Cf. EG 389 n. 2.

82. Cf. DRS 39.

83. These uses are no longer a lexical problem, but a semantic-grammatical one; cf. GVGSS I §§ 107, 109; DRS 201, 324; Barth, *Pronominalbildung*, pp. 103ff.; B. Kienast, "Erwägungen zu einer neueren Studie über semitische Demonstrativa", *Or* 16, 1957, 257-268 [on F. Rundgren's book below]; F. Pennacchietti, *Studi sui pronomi determinativi semitici* (Istituto Orientale di Napoli. Ricerche 4), Napoli 1968.

du:i:a, *dā* [f. *tā* is an analogical formation] (*GAL* I 265f.; *AEL* 947f., 984f.; *DMWA* 306f., 314ff.); *ESA d* (*SG* § 24.4, 25.1; *SD* 37; *DOSA* 89f.); Ug. *d*, *d*, *du-ú* (*UT* § 6.23-27; *DLU* 124); Heb. *zā*, *zō*, *zeh* (*HG* § 34.1-2; *HAL* 253ff.);⁸⁴ Phoen. *z*, *zy* (*PPG* § 113, 115-116; *DNWSI* 299f., 310ff.); Ebl. /*du/* (?) (*DLU* 124); Aram. *z*, *zy*, *d*, *dy* ... (*AG* § 17-18; *DNWSI* 299f., 310ff.; *DJPA* 144f.);⁸⁵ Syr. *d* (*SG* § 235-236; *LS* 137); Ethp. *za* (*EG* § 62, 64; *CDG* 629).⁸⁶ The form also occurs in composition with other demonstrative or general functors (h/w/y/k/l/m/n/t/l) to express either proximity/distance: Ar. *dāka*, *dālika*, *dālikum*, *hāda*; *li-da*, *ka-da*, *ha-ka-da* ... (*DMWA* 306f.), or emphasis: Ar. *ma-da*, *li-ma-da* ... *hā'ana dā*, *huwa da* (*DMWA* 306f., 1015), or question: Ar. *mā-da*, *li-mā-dā*; Heb. *mā-zeh*, *lam-mā-zeh* (cf. *infra* **m-*); or with other functors: *ESA d-b*, *d-l*, *d-bn*, *d'l* (*DOSA* 90). Also some conjunctive (composite and prosthetic), prepositional, relative-pronominal, genitival uses develop; cf. Heb. *bā-zeh*, *kā-zeh* ... (*HAL* 254); Aram. *kad*, *kēdī*, *kēd* (*DJPA* 250); also as comp. functor of direct speech; and with possessive value: *dy-d* (*DJPA* 145, better than > *d-yd*; cf. *dy-l*); Ethp. in composition: *ba-za*, ..., *bo za*, *'effo za* ... (*CDG* 628); doubled with distributive value: *zazza*, *zazzazi'a* (*CDG* 628); also in comp. in *ESA b-d*, *l-d*, *bn-d*, "some" ... (*DOSA* 46). - Der.: Ar. *dāt*, "essence"; *dātī*, "own"; *dātiyat*, "personality"; *dāwātī*, "exclusive" (*DMWA* 315); Aram. *mdl*, "property" (*DJPA* 292; > *m-d-l*); Syr. *medem*, "something", "someone", *medmoyō*, "indefinite" (*LS* 375; Syr. *den* is of dubious origin, perhaps related to **d* or Gr. *de*).

The original nominal character of this lexeme emerges clearly in Ar. morphology *du*, *dī*, *dā*, which preserves the full nominal declension, while Heb. and Aram. preserve the gen. *ze(h)*, /*dy/*, and Ethp. the nominalized ac.-constr. form *za*. Some support for its nominal character could also come from Eg. /*z/*, "man".⁸⁷ /*d/* would thus be an original common noun: "man, individual" > "the man (owner) of" > "this of" > "of", according to the level of indetermination assessed in Semitic: indeterminate possession of quality: "some, any", as a probable Primitive Semantic Universal.⁸⁸

As for Akk., the corresponding functorial element is *šū*, *šī*, *ša*: genitival construction, relative pron., compositional element [< pron. *šū*, *šū*]. According to *AHw*, this is also the phonetic correlate of *du* (< **ḏ*); but cf. Heb. *še-*, Phoen. *š* ...;⁸⁹ *infra* **š-*.

***h-** Multiple functor with exclamative, deictic (interj., assev.), demonstrative value,⁹⁰ a common phonosemantic universal, primary, autonomous phoneme in many languages.⁹¹ Different (compound) *deixis* and parallel linguistic developments within Semitic and other languages result, exhibiting various syntactic values: demonstrative (pron. and art.), relative, etc ...

A) Multiple independent *prepositive* functor:

a) Exclamative, deictic (interj.: *hā*('), "oh!", "lo!", "behold!"); Heb.-MHeb. *hā*, *hē* (*HG* § 105.1-2;

84. Cf. for instance J.M. Allegro, "Uses of the Semitic Demonstrative Element *z* in Hebrew", *VT* 5, 1955, 309-312; G. Chiera, "Il pronome *zū* in ebraico", *Fs. Moscati*, pp. 1109ff.

85. Cf. D.K. Andrews, *The Aramaic relative particle *dī* and the problem of translation Greek* [?], Diss. Univ. of Chicago 1943.

86. This form may be better explained as an accus. [?], like *zi'a*, than as a syntagm /*za/* + /'a Cush./; cf. *CDG* 630; *supra* n. 58.

87. Cf. Eg. /*s:z/*, "man", "somebody" (*CDME* 205); Eg. /*d:t/* "body" (*CDME* 317); but Eg. *t3*, "this", "the" (*CDME* 292).

88. Cf. Goddard-Wierzbicka, *Semantic and Lexical Universals*, pp. 22, 37ff., 449ff.

89. Cf. Diakonoff, *Proto-Afrasian and Old Akkadian*, p. 21. On the possible phonetic correlation /*d*/ // /*š*/ in Ug., cf. *supra* n. 30.

90. Cf. *GVGSS* I § 112; *DRS* 343, 345, 348; Barth, *Personalbildung* 72ff.

91. It disappears from Akk., where it becomes /(')i:ef/ (excl.-interj.; cf. *supra* /('a:i)/.

HAL 226; DTT 328); Aram. *h'* (GJPA § 56; DJPA 158; also > "but"); Syr. *hō* (SG § 62; LS 169); Mand. *ha* (MD 115); Ar. *hā-* (GAL I 296; AEL 947f., 3041; DMWA 1015),⁹² ESA *h* (DOS 103');⁹³ it appears in frequent and multiple comp. with other deictic elements with determinative (pronominal) value (h+d/y/k/l/m/n/t)⁹⁴ (DMWA 1015); sometimes coinciding with the homograph (or allomorph c,2); also modern Ar. *hayyā*, "come on!" (DMWA 1041).

b) Interrogative: *ha-*, "would...?"; Heb., Aram., *ha(')*- (HG § 100.4; GJPA § 46; DNWSI 264; HAL 226; DJPA 158); Ar. 'a (allophone; cf. *supra*, A,2); with possible comp. derivative: Ar. *h:'al* (GAL I 288; II 308f.; DMWA 1030); < /ha+(a)l(a)l/;⁹⁵ cf. Ug. *hl*, with exclamative, deictic value, rather an expansion of c,1 (PU 1 3; DLU 164f.);⁹⁶ other Ug. expansions *hlm*, *hlk*, *hln*, *hlny*.

c) Demonstrative, determinative, relative pronoun: 1) /ha/, "this", Semantic Universal;⁹⁷ Aram. *h'* (AAG § 39.II; DJPA 158 < A,a); alone or 2) in comp. with other elements (with various kinds of ellipsis and contraction): h+n/d/z/k/l/m/t; Ug. *hn* [?], *hnd* (UT § 6.22; DLU 167f.); Ar. *ha-qa*, *ha-ka-qa*, *ha-ka*, *ha-ka-hu* ... (GAL I 268; DMWA 1015); *han* (AEL 3045); Syr. *hon*, *hono* (SG 67; LS 178; diminutive *honūnō*); Heb. *hzh*, *hlzh*, *h'l*, ... (HG § 34.1; HAL 236, 253); 3) also as an adverbial component: Ar. *hunā*, *hunāka* (GAL I 288; DNWSI 1035; perhaps with dissimilation; cf. *hu-wa*); Syr., Aram. *ha-ša*, "now" > Ar. *ha-sa* (DRS 349 < *šācā*, *sācāt*). The functor is also attested in the NWS personal 3rd. s. pronoun: *hu-wa*, "he"⁹⁸ (with dissimilation).

d) Article (< relative pron.):⁹⁹ /ha(n)/, "the"; Heb., Phoen., ENA¹⁰⁰ *h-* (HG § 35; PPG § 117-119 [h:/]); HAL 225f.; DNWSI 263f.); with secondary enhancement (consonantal lengthening), the same phenomenon that produces the deictic comp. /hn/, /hl/,¹⁰¹ and the pronominal forms /hn/, etc. ... (cf. *supra* A,a); genetically related to c), since the article originally had a demonstrative meaning.

B) Multiple enclitic *postpositive* functor:

a) Exclamative (interjection): /-h/ "lo!"; Ar. *-ah*, *-hā* (GAL I 294f.; DRS 346); /-ah/ < case apophony?; Heb. cohortative *-āh* (HG § 48.3: < modal apophony?); Ug. *h* (?) (PU 1 40ff.: but this analysis is very controversial).¹⁰²

92. Also Ar. *hā'*, *hātī*, ..., "give!", "take!", "at (thy) service!"; *lā hā'*, "no, please!" (GAL I 296; AEL 2904; DMWA 1015) seem to belong here, despite the secondary hamza; a neutral verbalized form like /yʔ/.

93. For the many dialectal variants cf. DRS 345ff.

94. Cf. DRS 348, 351.

95. Cf. DRS 408f. for the different forms in the different languages; also H.R. Singer, *Neuarabische Fragewörter. Ein Beitrag zur historischen und vergleichenden Grammatik der arabischen Dialekte*, Diss. Erlangen 1958.

96. On the contrary an Ug. interrogative *h-* seems non-existent; cf. UT § 12.5 (KTU 2.5:3: lg. *pšlm*).

97. Cf. Goddard-Wirzbicka, *Semantic and Lexical Universals*, pp. 39ff., 468ff..

98. Cf. Del Olmo Lete, "The Semitic Personal Pronouns" (forthcoming).

99. Cf. A. Loprieno, "Osservazioni sullo sviluppo dell'articolo prepositivo in egiziano e nelle lingue semitiche", *ArOr* 19, 1980, 1-2; G. Coacci PolSELLI, "Funzione ed Uso dell'Articolo nelle iscrizioni Fenicie e Puniche", *RSF* 5, 1977, 117-125; T.O. Lambdin, "The Junctural Origin of the Semitic Definite Article", in *Fs. Albright*, pp. 315-333; P. Marrassini, "Considerazioni sull'articolo determinativo in semitico nordoccidentale", *Fs. Moscati III* 1185ff.; S.J. Croatto, "L'article hébreu et les particules emphatiques dans le sémitique de l'ouest", *ArOr* 39, 1971, 389-400; J. Kuryłowicz, "La mimation et l'article en arabe", *ArOr* 18, 1950, 323-328.

100. Cf. A. Livingstone, "An Early Attestation of the Arabic Definite Article", *JSS* 42, 1997, 259ff.

101. The Ar. forms *hal*, 'al are apparently allomorphic variants; cf. J. Kuryłowicz, "La mimation et l'article en arabe", *AO* 18, 1950 (*Mélanges Hrozny III*), 323-328.

102. This is also the case with O. Eissfeldt's, "Hebräisches *āh* und ugaritisches *āy* als Steigerungs-Afformative", *Kleine Schriften V*, Tübingen 1973, pp. 212-215.

- b) Interrogative and emphatic: /-h_v/, "do you?", "indeed!"; Ethp. *-hu* (EG 378; CDG 213).¹⁰³
- c) Asseverative, determinative: /-h_v/, "also, and"; Ethp. *-hi* (/ha, hi/) (EG 376f.; CDG 213).
- d) Terminative, locative adverbial functor: /-h/, "to, towards"; Ug., Heb., /-(a)h(a)[?]/ (UT § 11.1; HG § 90.1-2; PU 1 41f.; DLU 162f.);¹⁰⁴ Ethp. *-he* (EG 376f.; CDG 213; DRS 351), a sort of determination.
- f) Morphemic case determinative: Ethp. *-hā*, ac. with PNN (EG 320ff.¹⁰⁵); < case apophony?
- g) Suffixed personal pronoun: "his", "her" ...¹⁰⁶

This element disappears or in many cases becomes /ʔ/. As a morphemic element it sometimes functions as proclitic and infix (for the morphemic series cf. *infra*), and sometimes interchanges with e.g. /s/, thus showing its nature to be a Primary Semantic Universal as a generic determinative.

As in the case of other monoconsonantal elements, it could perhaps be traced back to a 'nominal' primary origin, apparently supported by its apophonic variants /ha:u:i/. But in this case the apophonies may be secondary (DRS 350f.), if we accept the onomatopoeic origin of the element /ha/ as a primary subjective 'expression' (of admiration, surprise, pleasure ...).¹⁰⁷

- *k- Multiple determinative / indicative CS. functor with the Bs. value equipvalence/ comparison/coincidence/equality: in structure or aspect (> "like, likely"), in time (> "in the same moment" > "when"), in relationship (> "in case of coincidence of any kind" < "if") and derivatives.¹⁰⁸

A) Multiple independent *prepositive* functor:

a) Emphatic, asseverative functor of identity/equivalence at the lexematic level (preposition, adverb): /k(i)/, "so!", "yes!", "indeed!" > "as", "like"; Akk. *a(k)kī, kīē* (GAG § 114.3; AHW 28, 468ff.; CAD K 322ff.); Ebl. *ga /ka/, gi /kī/* (Krebernik PET 84ff.; Gelb EDA 70); Amor. /ka, ki/ (CAAA 22); Ug., Heb. *k, ky* (UT § 10.9; HG § 102.2; PU 2 26ff., 31ff., 92ff.; DLU 206s; HAL 432s, 448);¹⁰⁹ Phoen., Pun. *k* (PPG § 251; DNWSI 482f.);¹¹⁰ Aram. *k* (AAG § 45; GJPA § 47.1; DJPA 249); Ar. *ka* (GAL I 280; AEL 2998); ESA *k* (SD 75sf; DOSA 237f.); with either apophony or enclitic expansion: Heb. *kō(h)* (HAL 439, "so" and "here" [< /kā/, /ka-hu/ (?)]); Aram. *kh* (DJPA 251s); Mand. *ka* (MD 194); Syr. *kō* (LS 314: "Nest. *nota praesentis ante participium*"), temporal (present) functor (cf. Heb. *kōh*); cf. postpositive Syr. *kō* (SG § 155b).

b) Correlative > illative > subordinative functor at the syntactic level (conjunction, adverb with Bs.: functional 'coincidence' > 'correlation' in time, interdependence/ causality, dependence/explanation ...): "when", "as", "if", "because", "then", "that"; Ebl. *ga /ka/, gi /kī/* (Krebernik PET 84ff.; Gelb EDA 70); Amor. /ka, ki/ (CAAA 22); Ug. *k* (UT § 12.3; DLU 205f.); Heb., Moab., Aram., Palm. *ky*

103. This form is perhaps related to 3rd p. sg., of the independent and suffixed personal pronoun: /ha/ > /h^w/ > *huwa* > *hū*.

104. Cf. E.A. Speiser, "The Terminative-adverbial in Canaanite-Ugaritic and Akkadian", *IEJ* 4, 1954, 108-115.

105. "There cannot remain a doubt that *hā* is the ground-form, of which *ā* is only a truncated remnant". But if so, the apophonic opposition /-u, -i, -a/ needs to be explained: originally also /-hu, -hi, -ha/?

106. Cf. Del Olmo Lete, "The Semitic Personal Pronouns" (forthcoming).

107. But all the apophonies could be primary onomatopoeic words; /hu/, /hi/, /ho/ ...

108. Cf. GVGSS I §§ 252, 254; Barth, *Personalbildung* 80ff.

109. Cf. T. Muraoka, *Emphatic Words and Structures in Biblical Hebrew*, Leiden 1985; S.J. Croatto, "L'article hébreu et les particules emphatiques dans le sémitique de l'ouest", *ArOr* 39, 1971, 389-400.

110. Cf. K. Jongeling, "K and Variants in Punic", in *Fs. Hospers*, pp. 101-109.

(HG § 104.1; GJPA § 48; DNWSI 497f., cf. also 482f.; HAL 448f.); Syr. *ke* (SL 325);¹¹¹ ESA *k* (SG § 32.1-2, 5; SD 75f.; DOSA 237ff.); Akk. *kī* (AHw 468f.; CAD K 316ff.).¹¹²

c) Expanded and composite forms with both uses: Akk. *akannali*, *kima*, *kimē*, *kīam*, *kišūma* (AHw 27f., 470, 476ff.; CAD K 325ff.); Akk. EA, Bo., Nuzi, Ug. (*a*)*kanna/ā*, *kinanna* (AHw 437, 479; CAD A/1 259ff.); Amor. /*kama*/ (CAAA 22); Ug. *kd*, *km*, *kmm*, *kmt*, *kn* (UT § 10.9; DLU 210, 217ff.); Phoen., Pun., Heb., Aram. *km*, *kn* (DNWSI 514, 516ff.); Heb. *kāzeh*, *kēmō*, *kāmā* (HAL 432, 458; reduplicative *kākā*, HAL 451); Aram. *kad*, *kēdī*, *kēd*, *kd*, *khdh* ... (GJPA 397-401; DJPA 249f.); Syr. *hokan*, *hokanō*, *ken* (?) (LS 175, 333); ESA *kq*, *kqm*, *lkq*, *lkdy*, *klkdy* (DOSA 238); Ar. *kama*, *ka-ḡa*, *ka-ḡalika*, *ka-mā* ..., *ka-anna* (DMWA 806f.); Ethp. *kaḥā*, *kaḥa-k* (< /ka-hā-k/), *kēma*, *kama* (EG 118, 381; CDG 278, 284f.). Special case: Ar. *kay*, comp. *li-kay*, *kay-mā*, *li-kay-mā* (GAL I 293; WKAS 1 478ff.; DMWA 848f.); and perhaps Syr. *kay* (SG § 155c; LS 325): < /ka-ya/ (?) or /k^y-i < kay/ (?).¹¹³

B) Enclitic *postpositive* functor:

a) Emphatic, explicative value: Ethp. *-kē* (EG 414; CDG 271).

b) Determinative functor of opposition / distance; Ethp. *-ku* (CDG 270; cf. EG 377); the same position can be confirmed in Ar. *-ka*: *ḡali-ka*, *huna-ka*, *til-ka* ... (DMWA 306f., 1035); Syr. *'aykō*, *lkō*, *mekō*, *horkō* (SG § 155b; LS 314); even in Ethp. itself with determinative, negative derivation, *'akko* (EG 120, 380; CDG 14: < /al-ko/ < /al-kona/ (?)).¹¹⁴ This functor appears also in this position in the pronominal series: /*anaku/i*/, with apophony, too.¹¹⁵ Cf. also *infra* the morphemic (pronominal) series in which this element appears as a multiple deictic, intensifying constituent, as well as pronominal-inflexional morpheme.

The nominal origin of this lexical element is suggested by the apophony /*ku*, *ka*, *ki*/, exactly as exhibited by the elements, /*ba*/, /*la*/, /*ma*/,¹¹⁶ which are homogeneous in function, perhaps with the deictic value of relation or comparison of objects, namely, the primary verification of juxtaposition of objects, corresponding to the Indo-European Semantic Universal /the same, like/.¹¹⁷

*I- Multiple functor of different Bs. value as implied by its apophonies and functional oppositions:¹¹⁸

A, 1) Emphatic, exclamative, vocative, asseverative(-positive) functor:¹¹⁹

a) Asseverative-desiderative of absolute degree, vocative: /*l(a)*/, "indeed!", "yea!", "oh!", "let it!":¹²⁰

111. Cf. F.R. Blake, "Studies in Semitic Grammar II", *JAOS* 62, 1942, 109-118 [8. New Syriac 'ke'].]

112. Cf. B. Brandstra, *The Syntactic Function of the Particle ky in Biblical Hebrew and Ugaritic*, Diss. Yale 1982; Tropper, *UF* 26, 1994, 460 n. 15, 474 n. 9.

113. Cf. in this regard *DLU* 205ff., which distinguishes two functors /*k*/ (prepositional and emphatic).

114. Cf. Bergsträsser, *Introduction to the Semitic Languages*, p. 124.

115. Cf. Del Olmo Lete, "The Semitic Personal Pronouns" (forthcoming).

116. According to Diakonoff (cf. *supra* n. 24) this case of apophony would be impossible in Semitic, an hypothetical root pattern /CV/ being ruled out.

117. Cf. *NM* 403f. (**k^hja:e*); *IEW* 451f. (*kā:ā*, *ke*, *kom*); Goddard-Wierzbicka, *Semantic and Lexical Universals*, pp. 39ff., 477f. ...; Wright, *GAL* I 280: "It is a formally undeveloped noun ... (*similitude*, *instar*)".

118. Cf. *GVGSS* §§ 252f.; Barth, *Pronominalbildung*, pp. 77ff.; D.D. Testen, *Parallels in Semitic Linguistics. The la- in Arabic and Related Semitic Particles*, Leiden 1998.

119. A distinction could perhaps be made either between: a) exclamative-interjectional functor (vocative) and b) emphatic-asseverative, or they could be considered as two different semantic developments of the same moneme.

120. We speak of 'absolute' and 'relative' degree in keeping with the suprasegmental expressivity.

Ebl. /la/ (Fronzaroli *ARET* 11 157); Amor. /la-, li-, lu-/ (CAAA 24); Ug. *l* (*UT* § 12.6; *PU* 1 38f.; *DLU* 238f.);¹²¹ Heb. /l/ (*HAL* 485f.);¹²² Phoen., Pun., Aram.(?), *l*, *ly* (*DNWSI* 549: precativ functor + csuf., cpref.: *l*₁); Nab. *l'* (*DNWSI* 560: *l'*₂: exclamatory); Mand. *l-* (*MD* 226: *l-* 5); Ar. *la* (*GAL* I 282f.; *AEL* 3006; *WKAS* 2/1 1ff.; *DWMA* 851).¹²³

b) Desiderative of relative degree, derived from the former: /l(a)/, "so that, for, in order to": Ar., *la* (*GAL* I 291: "this latter *li* is identical with the preposition *li*"; *AEL* 3006: *lāmu-l-intidā'*; *WKAS* 2/1 3ff.; *DMWA* 851: final, also + *wa / fa*); Ethp. *la* + jussive (*EG* 416; *CDG* 303: wish, command, emphasis).

A, 2) From this > comp. forms with two different semantic realisations:

a) Asseverative emphatic (affirmative) of absolute degree.¹²⁴ Akk. *lū* (*lu-*, *li-*, *la-*) (*GAG* § 121.10; *AHw* 558ff.; *CAD* L 224ff.); Heb. *lū* (*HAL* 495: precativ, emphatic); Ar. *law* (*GAL* II 347f.; *AEL* 3014; *WKAS* 2/3 1639ff.): < /la+wa/; Syr. *luway* (*LS* 361): < /la+wa+ya/.

b) Conditional-*irrealis* / desiderative relative degree: Akk. *lū ... lū*, "either ... or", *lu* (*GAG* § 117.6; *AHw* 561f.; *CAD* L 224ff.); Heb. *lū*, "if" (*HAL* 495f.: *irrealis* > desiderative, the same lexeme then);¹²⁵ Aram. *l'w* (*GJPA* § 46: *l' + hw'* [?]; *DJPA* 274); Ar. *law*, "if" (*GAL* I 294; *AEL* 3014; *WKAS* 2/3 1616ff.; *MDWA* 881): < /la+wa/;¹²⁶ -Ulterior comp. forms: Akk. *ūlū.u:ā:a* (*GAG* § 117.6; *AHw* 1407, 1411); Ar. *wa-law*, *fīmā law*, *law-lā*, *law-mā*, *law-lam*, *law 'anna ...* (*DMWA* 881); Heb., Aram. 'illū (*HAL* 495); Syr. 'ellaw (*LS* 21).

B) (Emphatic), asseverative-negative functor, by semantic (and morphemic/allophonic?) opposition (cf. *infra* **m(a)*):¹²⁷ /lā/, "no!", nominal and verbal negative functor: Akk. *lā* < *la*, *la-a* (*AHw* 521f.; *CAD* L 1ff.), with noun and verb; also comp. *ūl*, *ūla:ū*, "or" (*AHw* 1408f.); for Ebl. vd. /la(-a)/ (Krebernik *PET* 94)]; Ug. *l*, /la-a/ (*UT* § 12.4; *PU* 1 22ff.; *DLU* 237f.);¹²⁸ Phoen., Pun., Aram. *l'*, with various transcriptions (*DNWSI* 558ff.); Heb. *lō'* (*HG* § 100.1; *HAL* 486),¹²⁹ with various syntactic uses and comp.: 'ūlay (*HAL* 21: < /lō + lō:ū/, /ul + ai/; or better < /wa-lā-ya/); *lūlē'*(?) ... (*HAL* 498 < dissimilation from *lūlō'*); Aram. *l'*, with various transcriptions (*GJPA* § 46; *DNWSI*

121. Besides numerous studies of detail; e.g. H.-P. Miller, "Vocative *lamed* in the Psalter: a Reconsideration", *UF* 11, 1979, 617-637; M. Pope, "Vestiges of Vocative *lamedh* in the Bible", *UF* 20, 1988, 201-207.

122. Following the course of Ugaritic, there have been numerous studies on the 'emphatic' *lamed* in Hebrew. Among the first comprehensive ones cf. F. Nötscher, "Zum emphatischen *Lamed*", *VT* 3, 1953, 373-380; J. Mejía, "El *lamed* enfático en nuevos textos del Antiguo Testamento", *EstBib* 22, 1962, 180-190; T. Pennar, "'Lamed vocativi' exempla biblica-hebraica", *VD* 45, 1967, 32-46; M. Dahood, *Psalms III* (The Anchor Bible 17a), Garden City, NY 1970, pp. 406ff. And more generally T. Muraoka, *Emphatic Words and Structures in Biblical Hebrew*, Leiden 1985; S.J. Croatto, "L'article hébreu et les particules emphatiques dans le sémitique de l'ouest", *ArOr* 39, 1971, 389-400.

123. Cf. K. Petráček, "Zur Artikulation des sogenannten emphatischen *l* in Arabischen", *ArOr* 20, 1952, 509-523; C.A. Ferguson, "The Emphatic *l* in Arabic", *Language* 32, 1956, 446-452.

124. Cf. J. Huehnergard, "Asseverative **la* and Hypothetical **lu/law* in Semitic", *JAOS* 103, 1983, 569-593.

125. Cf. R.C. Steiner, "Lulav versus **lu/law*. A note on the conditioning of **law/lu* in Hebrew and Aramaic", *JAOS* 107, 1987, 121f.

126. The apophony /lū/ could derive as a unit from /la-wa/, in Akk. and in Heb., in which case instead of /lō/, by palatalization (perhaps as a loan from Akk.?), by discriminative opposition to *lō* (< /lā/), a negative functor.

127. Negation is asseveration at the deictic level; opposition comes from the object or referent and becomes one of the devices of semantic shift. In this case the morphemic opposition to A) passes through the quantitative apophony (short/long), suprasegmental intonation (rhetorical question) or simple polar semantic opposition.

128. Cf. Ug. syll: NU = /la-a/ = /ma-nu-ku/ = /l[]a-a/, Ug 5 130 II 7'; Huhnergard *UVST* 141; Van Soldt *BiOr* 47, 1990, 731; Van Soldt *SAU* 304. Cf. Aartun. *PU* 1 22ff.; W.G.E. Watson, "The Negative Adverbs *L* and *LM+L* in Ugaritic", *JNSL* 17, 1991, 173-188.

129. Cf. R. Weiss, "Notes on the Use of the Negative *lō'* in the Bible" (Heb.), in *STLB* 20ff., 128*.

558ff.; *DJPA* 274); also interrogative comp. /l'w/ < /la'-wa/,¹³⁰ better also than < /l' + hw'/; Syr. *lō*, *law* (*LS* 354, 360); < /lā-wa/, better than < /lā-hwō/ (*DNWSI* 559); with comp. functors > 'elō, *dlō*, *wlō*, *law lō*; Mand. *la-* (*MD* 227; also with comp. *lau* (*MD* 227: < /l' + hw/); Ar. *lā* (*GAL* I 287; *AEL* 3006f.; *WKAS* 2/1 18ff.), with multiple comp. along with other functors (: 'alā [cf. *supra*], *bilā*, *walā* ..., *la-m*, *la-n*, (*AEL* 3013; *DMWA* 85ff.) and nouns as adverbial expressions: *lā šakka*, *lā siyyama* (+ indefinite ac.); or as comp. nouns / adjectives: *lā-dīnīya* (*DMWA* 852).

C) Multiple (directional) functor of attribution, belonging, direction of something in relation to another as preposition and conjunction (finality):¹³¹ /li/: "to, for, by, from" (nominal and verbal); Akk. *la* < Aram. (*GAG* § 114e; *AHw* 520; *CAD* L 5);¹³² Amor. /la, li/ (*CAAA* 23); for Ebl. cf. *li-na* (*Pettinato Rituale* 217); Ug. *l*, *ly* (*UT* § 10.1; *PU* 2 31-50; *DLU* 234ff.);¹³³ Ug. syl. *le-e*, Ug 5 130 III 5';¹³⁴ Heb. /la:e:i/ (*HG* § 102.2; *HAL* 482ff.); Phoen., Pun., Aram.: *l*, with multiple transcriptions: *l*, *li*, *ly*, *la*, *lu* (*PPN* § 251.1; *AAG* § 45; *DNWSI* 549ff.); Aram. *l* (*GJPA* § 47.1; *DJPA* 274, also as *nota ac.*); Syr. *l-* (*SG* § 156; *LS* 354); Mand. *l-* (*MD* 226; also as *nota ac.*); Ar. *li* (*GAL* I 279, 291;¹³⁵ *AEL* 3006f.; *WKAS* 3ff.; *DMWA* 851); ESA *l* (*SG* § 53; *SD* 81; *DOSA* 255f.); Ethp. *la* (*EG* 391f.; *CDG* 303, also as *nota ac.*).

This functor is present in syntagmatic comp. with verbal bases denoting multiple relationship (government): *commodi*, verbal object complement, time, possession, result, determination, distribution; also with nouns, pronominal suffixes, and other functors, e.g.: Ar. *li'aḡli*, *li'an*, *li'anna*, *lidālika*, *likay*, *limā*, *lihādā*, ... (*AEL* 3006; *WAKS* 16ff.; *DMWA* 851f.); ESA *lkd*, *klkdy*, ... (*DOSA* 256); Phoen., Pun., Aram. *l'yny*, *lšd* ... (*DNWSI* 550); Heb. *lēmō*, *lāzeh*, *lābetāh*.. (*HAL* 482ff.: 26 different positions are singled out; in verbal syntagm only with infinitive). In composition with pronominal suffixes this functor is used in all the Semitic languages; because of its peculiar forms, cf. Ethp. *la* with personal suff.: *lita*, *lalleya*, *lallihu*, and the double distributive *lalla-* (*CDG* 303).

Apparent homographs of biconsonantal base:

Akk. *lu* I, "bull" (*AHw* 560; *CAD* L 227f.): > /l-'/.

Akk. *lu* II, "dish" (*CAD* L 228): > /l-'/.

The nominal and verbal (Ar. /lā/, /lam/, /lan/) negative function indicates its original nominal character, perhaps onomatopoeic/deictic in nature. In any case, its Bs. as a Universal Semantic¹³⁶ is that of "ownership" > "affirmation" > "attribution" (positive and negative). Opposite to /d-/ , which has a similar basic meaning, /l-/ does not imply originally 'subjective' ownership or possession, but 'objective' attribution ("it does not pertain to me but to you / it") and consequently 'points to' another (direction). Its apophonic structure (/lu:ū/, /la:ā/, /li/; cf. the Amorite realisations) points in the same direction, too, of an original

130. Cf. K. Aartun, "Der hervorhebende Endung -w(V) an nordwestsemitischen Adverbien und Negationes", *UF* 5, 1973, 3ff.

131. Vd. E.F. Sutcliffe, "A Note on 'al, l', and from", *VT* 5, 1955, 436-438 [against the 'meaning' *from*]; Z. Zevit, "The so-called interchangeability of the prepositions *b*, *l* and *m(n)* in Northwest Semitic", *JANES* 7, 1975, 103-112.

132. Also Akk. of Emar /la/; cf. D. Arnaud, *Textes syriens de l'âge du Bronze Récent* (AuOrS 1), Sabadell (Barcelona) 1991, p. 12.

133. Cf. Dijkstra, *UF* 19, 1987, 43 n. 29; Tropper, *UF* 26, 1994, 460 n. 14, 474 n. 11; De Moor *SP* 95 n. 5, 120; Zevit, *JANES* 7, 1975, 103ff.; Pardee, *UF* 7, 1975, 329ff.; 8, 1976, 215ff.; 9, 1977, 205ff.; 11, 1979, 685ff.; Dahood, *BiOr* 38, 1981, 671ff.

134. Cf. Sivan *GAGI* 241; Huehnergard *UVST* 142; Van Soldt *SAU* 304.

135. *Lāmu-l-āmri*, *lāmu-l-nāsibatu*: 'this latter *li* is identical with the preposition *li*'

136. Cf. Goddard-Wierzbicka, *Semantic and Lexical Universals*, pp. 43f., 476f.

inflected nominal lexeme perhaps with different grammatical functions (/la/, /li/). The emphatic (/la/) and negative (/lā/) function would derive from this Bs.: belonging > attribution, positive as well as negative (by apophonic degrees and later reinforcement [/la-'a:i/](?)). In this way there would be no need to distinguish two series, one volitive and the other descriptive.¹³⁷

*m- Multiple functor of identification/determination¹³⁸ with secondary, apophonic alternative specifications.

A) 'Human'/'personal', interrogative < determinative < relative < indefinite pronoun, sometimes interjective:

a) First series, /m-/ > /m-+ya/ > /mī/, "who?", "who"; Can. *mi-ja*, *mi-ja-mi*, *mi-ja-ti* (GAG I 248; CAL I 106ff.); Heb. *mī* (HG § 37.1-2; HAL 544s; Ug. *my* (UT § 6.28; WUS 183); cf. also *mat* (< /m(y)+at/, Hb. *mī* 'at (HAL 54))¹³⁹ and *my lim* (UT § 12.8; cf. in this regard *infra* B) Ethp. *mī*); Phoen., Pun. *my* (PPG § 120, 124; DNWSI 619).¹⁴⁰

b) Second series, /m-/ > /m-+(a)n/ > /man/, "who?", "who": Akk. *man*, *mannu*, (GAG § 47.1-2, 48.1-2; AHw 603; CAD M/1 213ff.), with secondary case endings by analogy; Aram. *man* (AAG § 41; GJPA § 19.1; DNWSI 648f.; DJPA 312f.); Syr. *man*, *manaw* (SG § 68; LS 393: </man+hwō/); Mand. *man* (MD 246); ESA *mn* (SD 86; DOSA 279); Ar. *man*, *manū* (GAL I 273ff.; AEL 3024; DMWA 924), also with secondary case ending; Ethp. *mannu*, also with exclamative value (EG 118; CDG 348: < /man + nu/); for Ethp. *mi* cf. B). From it there are quite a number of derived forms for the so called "indeterminate/indefinite pronoun": Akk. *mannume*, *mamma(n)*, *mannumman*, *mamāna*, ... (AHw 600ff.; CAD M/1 218f.); Ug. *mnm*, *mnk*, ... (UT § 6.30); Phoen., Pun., *mnm* (DNWSI 661); ESA *mn-mw*, *mn-d*, *mn-l*, *mn-l-mn*, *mn-m* (SD 86; DOSA 279); Ar. *minman* (DMWA 924); Ethp. *mannu-hi*, *za-mannu* ... (CDG 348).

B) 'Non-human'/'objective', interrogative < determinative < relative < indefinite pronoun, sometimes interjective; /m-/ > /m-+ha/ (cf. Ug.) > /mā/, "what?", "how?", "how much?", "what"; comparative, conjunctive "that" (Lat. *quod*; Sp. *que*: derived function); Akk. *mā*, *mīnu* (GAG § 47.2, 155.1; AHw 570, 655f.; CAD M/1 1ff.; M/2 89ff.); Ug. *mh*, *mn* (UT § 6.28f.);¹⁴¹ <(?) /m-h/ < /ma+ha/, with later contraction /mā/ as in Heb., and /m-(h-)n encl./, as in Akk., Syr. and ESA /m+h+n/; and probably also deictic *mk* (< /m+k/);¹⁴² Heb. *māh* (HG § 37.1-2; HAL 522f.); Phoen., Pun., Heb., Aram., Nab., Palm. *mh* (PPG § 120; DNWSI 599f.: Heb. *mh*, *mhw* [< /m+h(w)/ (?)]; Phoen.-Lat. *mu* [/mh + hw' (?)]); Aram. *m'*, *mh*, *mhy*, *myy*, *mhw*(') (AAG 41; GJPA § 19.1; DJPA 293); < /mh hw:y'(?)/); Syr. *mō*, *mon*, *monō*, *monaw*, *monon* (SG § 68; LS 372, 393), by successive increments < /m+n encl./, /mn+hwy/, /mono+n encl./; Mand. *ma* (MD 237f.); Ar. *mā* (GAL I 273ff.; AEL 3016; DMWA 888: with multiple conjunctive uses: "as long as", "whenever", "as far as", ...);

137. Namely: /(*lu*), *li*, *la*/ :: /*lū*, (*lī*), *lā*/, from which the opposition /*la*/ # /*lā*/ as well as the corresponding /*la*/ # /*lū*/, /*lū* # /*lā* (*lō*)/ emerge. The lengthening /*lū*/ may be secondary by analogy with /*lā*/ of an otiose /**lu*/. Or perhaps the whole series has an onomatopoeic, exclamative origin (?). Cf. A. Farber, "On the nature of Proto-Semitic *l", *JAOS* 109, 1989, 33-36.

138. Cf. GVGSS I §§ 110ff.; Barth, *Pronominalbildung*, pp. 137ff., 169ff. The distinction of two series [personal / impersonal] may be structurally parallel with the 3. p. personal pronoun: /*ha+wa*/ /*ha:i+ya*/ :: /*ma+ha*/ = /*mā(h)*/; /*ma:i+ya*/ = /*mī*/; and in apophonic analogy with the ancient demonstrative pronoun /*dā*/ :: /*dī*/ (Brockelmann). Cf. also IE *me-*, "Grundlage von Adverbien (Präpositionen), mitten in ..." (*IEW* 702f.).

139. But cf. WUS 175: *mat* < *m+at*, 'was' ...

140. Cf. M.G. Amadasi Guzzo, "MY Pronom Relatif en Punique", *GLECS* 24-28 (1979-1984) 31-37.

141. Cf. F. Bron, "L'élément pronominal *mh-* en ougaritique, sud-arabique et arabe", *GLECS* 18-23/3, 1973-1979 (1983), 707-709.

142. But cf. Eg. *m.k*; UT § 12.7; and Akk. (NAss.) *muku* (?) (GAG § 121.2); PU 1 71f.

ESA *mh-n* (SD 84; DOSA 267); Ethp. *mi*, “what?”, “how?”, as a prefixed exclamative functor (EG 119: “appears to be a corruption of a form like *mā*”, but cf. *supra* Ug. *my*; CDG 323); < /ma+ha:i/ [?]).

This element enters in multiple free and enclitic, *postpositive* comp. with other functors: Ar. *limā*, *bimā*, *mimmā*, *ilā mā* ... (AEL 3016; DMWA 888); Heb., *bammāh*, *kammāh*, *lāmāh*, *mazzeh*, *mah-zeh*, *bammāh*, *kammāh*, *lammāh*, ‘*ad-māh*, ‘*l māh* (HAL 522f.); Syr. *lmō*, *lmonō*, *dalmon*, *dalmonō* (LS 372, 393; > *monoyowātō*); Ethp. ‘*ama*, ‘*ēma*, ‘*ēm*, ‘*ēsma*, *kama*, *kēma* (EG 119f., 381: “regularly put last”, also with negative value); and *prepositive* v.g. Ug. *mhk*, *mnk*, *nmn* (UT § 6.29f.); Aram. *mz*, *mzy*, *mdy*, *mh dyl*, *mh dlmh*, *mhw*(‘) (DNWSI 599ff.; DJPA 293ff.); ESA *mhn* (SB 84; DOSA 267); Ar. (li-) *mādā*, ... (DMWA 888); Ethp. *mi-lita*, *mi-ke*, *mi-maṭana*, *mi-gize* (CDG 323); and pre-, *postpositive* Akk. *mimma:u:i:ē*, *mimmū*, *mimmāmu:a*, *minsu*, *miššu*, *mīnummē* (AHw 653ff.; CAD M/2 73ff.).

C) Emphatic, specifying, coordinative *postpositive* functor, /-m/: cf. Akk. -*mi:e*, -*ma:u:e*, -*mā* (*mā*), -*min* (GAG § 123.1-5, 155.1; AHw 569f., 650, 654; CAD M/2 46: in quotations, questions and emphasis); Amor. -*ma:i* (CAAA 24); Kan. -*mi:a* (Rainey III:227ff.); Ug. -*m* (UT § 11.4; 13.99-102: PU 1 39, 51ff.); Heb. -*m* (HAL 510; cf. *infra* E) encl. /-m/;¹⁴³ ESA -*m*, -*w*, -*my* (SD 83; DOSA 265); cf. also the *postpositive* use of Ar. *mā* (GAL I 277f.; AEL 3016; DMWA 888); Ethp. -*mma*, (EG 382; CDG 323).

D) Negative functor, by inverted semantic shift? (“something” # “nothing”; cf. *supra* /la/; Lat.-Cat. *res*), originating from its interrogative/indefinite value, /ma/, “no”; Heb. *māh* (HAL 523); Ar. *ma* (GAL I 287; AEL 3016; DMWA 888).¹⁴⁴

E) Cf. the element /m/ in the morphemic series, as a derivative morpheme (*infra*).

The simple element /m/ was originally a Primitive Semantic for “something” (?) or general objective referent¹⁴⁵ > the “thing” > “indeterminate” > “unknown” in its nature and meaning > interrogative, indeterminate uses (“something” is semantically ambiguous: reveals and conceals at the same time). On the contrary, the historically ascertained forms /mi(y)/, /ma(h)/ are compound/derivative forms, possibly based on the pattern of the 3 sg. p. pronouns, namely, by means of cumulative deictic elements. Furthermore, the opposition personal/ impersonal /mi:ma/ is, like the opposition m./f., secondary and cultural, as is evident from its later divergence in the different Semitic languages (/my, ma/, /ma-n, ma/, /ma-n, mi-(n)/), as was the case with the forms of the 3 p. pronoun. The apophonic variation apparently confirms (?) its nominal origin and value (/mu:a:i/); the nominative function almost disappears due to the pervasive functorial use, always indirect.

Apparent homographs:

Akk. *mū* I, “water” < /m-':y/.¹⁴⁶

Akk. *mū* II, “ordenances” < Sum. loanword /me/.

Syr., Ar. *mū*, a plant (LS 376) < Gr. /mēon/.

Mand. *ma*, “hundred” < /m-(-)/.

143. Cf. H.D. Hummel, “Enclitic *mem* in Early Northwest Semitic, Especially Hebrew”, *JBL* 76, 1957, 85-107. But cf. J.A. Emerton, “Are there examples of enclitic *mēm* in the Hebrew Bible?”, *Fs. Haran*, pp. 321-338.

144. Any relationship with IE *mē-*, “(dass) nicht, prohibitiv” (*IEW* 703), is dubious.

145. Cf. Goddard-Wierzbicka, *Semantic and Lexical Universals*, pp. 37f, 449ff.

146. Cf. Diakonoff, *Proto-Afrasian and Old Akkadian*, p. 69, n. 81, 76.

- *n-** Emphatic, multiple functor with various by-forms and apophonies; the simple element /n/ was originally (cf. *supra* *m) possibly emphatic:¹⁴⁷
- A)** Emphatic *prepositive*, deprecativ functor /na-/, "behold!": Ethp. *na-* (EG § 160.1; CDG 380: <? /a:in(+n)a/),¹⁴⁸ with 1st and 3rd p. pronouns: *naya*, *nayo* ... ; and with neutral value in *nawā*, *nāhu* (CDG 380).¹⁴⁹
- B)** Emphatic *postpositive*:
- a) Verbal-deprecativ (imperative, cohortative) /na(‘)/:¹⁵⁰ Akk. *-na* (GAG § 83c; AHW 693); Amor. /na/ (?) (CAAA 528); Phoen.-Pun., Heb. /-n(‘)/ (DNWSI 710); Heb. *-nā* (HG § 105; HAL 620); Syr. *nēī* (LS 410); Ethp. *-na*, *-ni*¹⁵¹ (EG § 160.1; CDG 380: asseverative with additive and alternative value); in multiple coordination with many other functors: *'eska-na*; *'emma-ni*, *-ni wa* ... *-ni*, *-hi wa* ... *-ni*, *wa-* *'i-mēntā-ni*, *wā-'i-'ayte-ni* ... (CDG 380); cf. *supra* *-, *h-*, **m-* ...
- b) Interrogative, emphatic /-nu/: Ethp. *-na*, *-nu*¹⁵² (EG § 160.2; CDG 380f.); after pronouns and verbs, and also in composition with other functors, v. g. : *bo-nu*, *'akko-nu*, *'albo-nu*, *mēntē-nu*, *'ayte-nu*... (CDG 380f.).
- c) Determinative value as article /-n/: ESA *-n* (SG § 13.1-4; SB 29).
- C)** Locative, *postpositive* directional functor /-ne/, "away to", "at the moment of": Ethp. *-ne* (EG § 143.2, 160; CDG 380: <? /-n-(h)e/).¹⁵³
- D)** Morphematic multiple functor (cf. *infra* 'morphematic series').

The origin of this lexical element is very difficult to determine. It goes back perhaps to a generic deictic-emphatic marker, witnessed in the whole Nostratic area and with onomatopoeic overtones, which has been displaced by other markers (/b/, /l/, /m/) to the enclitic position. Semantically, this deixis in Semitic indicates the basic value of emphatic demonstrative deixis. It has no traceable nominal stem (nasal onomatopoeia?),¹⁵⁴ representing in this sense also the lexical semantic universal "this", "something" as /m/, but as an original onomatopoeic deixis with suprasegmental emphasis.

147. Cf. GVGSS I § 107; Barth, *Pronominalbildung*, p. 34.

148. Possibly < Semitic (Ar., Hb.): /in, hn/; Akk. /anna/ ..., as emphatic marker (cf. *supra*); so CDG 380. But more probably a reclamation of former /-na(‘)/, in keeping with the characteristic tendency of Ethiopic as far as pre-, postpositive collocation of functors goes. Cf. also EG § 160.1 for *nā'a*, *nā'ā*, probably of biconsonantal origin (< /n-(w)/, Heb. *nā'*; Ethp. *nā'awa*), rather than < /-n-/ (cf. CDG 382).

149. The Akk. functors *in(a)*, *an(a)* should be explained from this element (by prosthesis), better than by appealing to a comp. < /:h-n/; cf. also M. Dattilo, "Le preposizioni *in*, *mi-in*, *mi-nu* nel Rituale di intronizzazione ad Ebla", *AuOr* 14, 1996, 169-179.

150. The alef is not original to the root and so the difference with the former is simply orthographical; it is then unnecessary to postulate a double cumulative deixis: /n+’/.

151. On its part, Ethp. *-ni* must be considered an allophone of Sem /-na(‘)/ (cf. Syr. *-nī*, cohortative, for the apophony), and like the following one, reduced to *-n* in the Ethiopic dialects.

152. It reinforces other functors (above all interrogative ones) and may also follow verbs and negative functors.

153. But the 'directional' value probably comes from its deictic basic meaning: "behold!" > "over there" > "in such a direction", without claiming a comp. deixis /-n+h/ ... In this sense this functor may be semantically and functionally similar to locative /-ha/; cf. CDG § 160.1(a).

154. Cf. Nostratic **na'***ne-*, **ni-*/**ne*, **nu'***na*: 'demonstrative stem' (NM 688f.); IE *eno-*, *no-*, *nā*, *ne*: 'Pronominalstamm' > "jener", "so, dann, fürwahr", "gleichsam, wie, und zwar" (IEW 319f.).

***p-** Determinative multiple functor:¹⁵⁵

A) Prepositional functor of place and time: /p(i)/, "in"; Ar. *fī*, *fīmā* (GAL I 280f., II 61; AEL 2466f.; DMWA 734); with comp. like *fīmā ba^cdu*, *fīmā 'idā*, and the archaic *yā fayya*; Nab. *py* (DNWSI 909).

B) Adverbial determinative of place/time: /p(u:a)/. "here", "now"; Ug. *p* (UT 465; WUS 251); Phoen.-Lat. *pho* (PPG § 248a; DNWSI 902)¹⁵⁶ Heb. *poh* (HAL 866), with the comp. *mippolō(h)* (for 'ēpolō(') cf. *infra* C).

C) Conjunctional copulative and apodotic functor: "here" > "and", from determination /deixis to 'indication', 'addition' > "here too", above all in introductory or 'strong' position, more determinative than *wa*, which is a marker of mere sequence or series: /p(a)/, "and", "also" > consecutive "then", "so" in WS area;¹⁵⁷ Ug. *p* (UT § 12.1; WUS 251); surviving maybe in Heb. **p* (?) (HAL 858) and comp. *pn* (PU 2 87); AAram., Aram. *p*, *p'* (AAG § 46.3; DNWSI 898f.); ESA *f* (ASG § 127; SG § 31.2-3; SD 42f.; DOSA 399); with comp. *f^w*, *f^l*, *f^h*, *fⁱ*, *f^r*; Ar. *fa-* (GAL I 290, II 345ff.; AEL 2321ff.; DMWA 691); with comp. like *fa'inna*, ... It may also be present in Ar. *kayfa*, "how?"¹⁵⁸ and comp. *kayfa lā'*, *kayfa-mā*, *fa-kayfa bi*, *kayf*, "quality" (GAL I 289; WKAS K 496ff.; WMRA 849f.); < /ka-ya-fa/ (?); cf. **k-*.

As for the apparent prosthetic allomorph /'ap/¹⁵⁹ we have perhaps here two different lexemes: monoconsonantal /p-/ and biconsonantal /'p/¹⁶⁰ cf. Ug. *ap* (UT § 11.10; PU 2 88ff.; DLU 42f.), as in other NWS. languages (cf. *supra* *'a), with comp. like *aphn*, *apn*, *apnk*; Heb. 'ap (HG § 104.2; HAL 73f., 76); comp. 'ap-kī, also expansion 'ēpō, "then" (HAL 76) and Ethp, 'ēffo, "how?" (< /'ap hū/) and super-expansions 'ēffoffo, 'ēffāffo ..., ba-'ēffo, 'ēffo-nu ... (EG 379; CDG 9) may be taken as prosthetic expansions of this element also.; Phoen. 'p (PPG § 257b; DNWSI 92ff.); Aram. 'ap (GJPA § 55; DJPA 68f.), with comp. like *ap 'al gab / pî*; Mand. *ap* (MD 30).

Apparent homograph:

On /p(m)/ "mouth", cf. the referential series, *supra*.

The different apophonies argue in favour of an origin as a nominal moneme /p-/ with the generic value of "here (it is)" > "place"/"situation".¹⁶¹ It can be ascertained in this case in Ar. *fī*: "here" > in > with nominal and verbal (adverbial) development: "here (it is)" > "in" // "there is".¹⁶² At all events, its phonetic and semantic connection with /b-/ makes them two possible allomorphs, at least in connection with the value "in". Furthermore, the various allophones /pi/, /pa/, /po/ are closely related both semantically (/pi/ and /po/, /pa/ and /po/) and phonetically. As in other cases (/bi/, /li/) prepositional use may have induced the apophony /pi/ (by analogy or due to the genitival (?) function), as against use as a conjunction /pa/ (?).

155. Cf. GVGSS I § 254; Barth, *Pronominalbildung*, p. XVI; G. Garbini, "Il tema pronominale p in semitico", *AION* 31, 1971, 245-248; Diakonoff *et al.*, "Historical Comparative Vocabulary of Afraisan", *SPJAS* 2, 1993, 8.

156. For a possible ancient AAram. *p'*, "here", cf. DNWSI 899.

157. Cf. G. Garbini, "La congiunzione semitica *pa-", *Bib* 38, 1957, 419-427.

158. Its nominal and verbal values should be considered derivations of this lexicalized functor.

159. Cf. GJPA § 55, n. 3: "Nach Nöldeke, ZDMG XLVII 103, viell. zusammenhängend mit dem *py* "und" der aram. Inschriften der Nabatäer und von Sendschirli".

160. Cf. in this connection Nostratic *'a:ep[h] (NM 568f.); IE *epi*, *opi*, *pi*, **p*, "nahe hinzu, hinter, nach" (IEW 323ff., 841; cf. also IEW 53f.: *apo*, *po*, *ap-u*, *pu*, "ab, weg", "weiter weg, hinter, später").

161. Perhaps as a phonological variation of the primary bilabial articulation: /b :: p/ with related semantic value.

162. Cf. R. Weill, "Le verbe d'existence p: et ses dérivés", *RE* 6, 1951, 49-88.

- *š- Coordinative multiple functor with function of relative pronoun and conjunction /š/, "that":¹⁶³ Akk. *ša* (GAG § 137; AHw 116ff.; CAD Š/1 1ff.: *š/ša* with dentals);¹⁶⁴ for Akk. *-iš* cf. *infra* n. 198 (GAG § 67.8); Heb. *š-* (HG § 36; HAL 1271f.); Phoen. (')š (PPG § 121-122; DNWSI 189ff.).

Primitive Universal "something", "that",¹⁶⁵ of nominal origin /šu/ with multiple apophony. We have here the same lexical element as in the 3 p.s. personal and demonstrative /šu/ of the Akkadian pronominal series, as is evident from its use in that language (cf. AHw 1254; CAD Š/3 152ff.); the different values of the masoretic allophones must always be taken into account. The parallelism in function as well as some transcriptions in Akk. and Ug. pose the question of its primitive (abnormal) allophony or independent lexematic origin from *š. This is evidence perhaps of an intermediate sound as supported by Akk. /š:š/, a conditioned alternation.¹⁶⁶

Apparent homographs:

Akk. *šū* II, "a (precious) stone" (AHw 1254; CAD Š/3 161); < Sumerian loanword [?].

Akk. *šū* III, "ram", Ug. *š*, Phoen. *š*, Heb. *šeh* < *š, cf. referential series.¹⁶⁷

Akk. *šū* IV, "an illness" (?) (AHw 1255; CAD Š/3 161f.) < Akk. *šū* II (?).

ESA. *s¹/š*, "to, towards" (SB 121; DOSA 321), prepositional functor, very uncertain element. According to DOSA (p. 330) assimilation of *šn*, *šwn*.

- *t- Emphatic, exclamative functor,¹⁶⁸ this phoneme provides an original realisation belonging to the functorial series /t(u/a)/, as a functor of oaths ("(by) the life of"): Akk. *tû(m)* (AHw 1364); Ar. *ta-* (AEL 291; MDWA 88); Syr. *tā*, "wohlan" (GVGSS I § 255).

Of Sumerian origin < Sum. /t/ [?]; or perhaps this form is related to a possible original moneme /tu/ with the generic value of "sacred place" (as against /pu/ [?]): < "(by) the sacred place/temple of", related to the binary or extended base: /ta'-w/ "cella", "inner room": Heb. *tā'* (HAL 1541); Akk. *tā'u* (AHw 1340: loanword?);¹⁶⁹ Pun. *tw* (DNWSI 1204).¹⁷⁰

Apparent homographs which resort to either loanwords or binary radicals:

163. Cf. GVGSS I § 109; Barth, *Pronominalbildung* § 73-74.; Diakonoff, *Proto-Afrasian and Old Akkadian*, 15.

164. Cf. A.G. Kifisin, "Assiriologiceskie zametki. Reljativnaja forma ša -šu v akkadskom jazyke", in *SJ*, pp. 786-792. Perhaps Ug. /š/, "the one of", is an orthographic variant for *q* in PN *šb¹l* (*šm b¹l*?) and some others; or as a theophoric element in final position, v. g., *gmrš*; cf. WUS p. 298; Dahood *Bib* 53, 1972, 401. It could be dismissed as an 'Amorite' reflex (?).

165. Cf. Goddard-Wierzbicka, *Semantic and Lexical Universals*, pp. 37ff., 449ff.; Nostratic **sa:e*, "demonstrative pronoun stem: this, that" (NM 364f.); IE *se-*, "Reflexivpronomen" (IEW 882).

166. Cf. *supra* nn. 28, 89 on **q*.

167. Cf. R. Weill, "Le nom du dieu šw et sa fonction essentielle", *RE* 6, 1951, 227-229.

168. Cf. Barth, *Pronominalbildung*, pp. 83ff., for the different uses of this 'demonstrative' element: pronominal and morphemic (enclitic) series.

169. Cf. W. von Soden, "Akkadisch *ta'u* und hebräisch *ta'* als Raumbezeichnungen", *WO* 5, 1950, 356-361 (I pl.). Also Eg. *t3*, "earth" (SIGN = scarab beetle); cf. CDME 292 (W.G.E. Watson's suggestion).

170. This may be related in some way to the values of the letter /taw/: "sign" to mark out property (originally, "belonging to the sanctuary?") as a grapheme and oath functor as a phoneme. That would explain both the Akk. and the Ar. usages (?); cf. HAL 1541f., 1560f.; C.J. Ruijgh, "La date de la création de l'alphabet grec et celle de l'épique homérique", *BiOr* 54, 1997, 533-603 (rev. of B.B. Powell, *Homer and the Origin of the Greek Alphabet*, Cambridge 1991), for the meaning of the sign/sound /t/. On the symbolism (life) of the linear character *tau* see H. Marblestone, "Matauitatau in Petronius Satyricon 62,9: Crux Interpretum", in *Fs. Gordon* 1998, pp. 498ff.

Akk. *tā* II, *tu'u* (AHw 1364, 1375; CAD T 166f.); < *di'u* II, *du'u*, *dū*, "cultic podium" (AHw 174).
 Akk. *tā* III, "clothing" (AHw 1364); < Sum. *tu₉*.
 Ar. *tā*, f. "this, that" < analogical (trans-)formation of m. *dā* based on the f. morpheme /-(a)t/.

*w- Determinative multiple functor.¹⁷¹

A) Emphatic, exclamative functor: /wa/, "alas!", "bye!" (cf. *supra* *'a); Akk. *ū'a:i*, *ūya*, *wā(ya)*, "woe!" (GAG § 124.13.3; AHw 1398); Ar. *wā* ... *āh* (cf. *supra* /-h/), "alas", (GAL I 294f.; AEL 3048; DMWA 1044); with common expansion /w(a)+y(a)/:¹⁷² cf. Ar. *way*, *wai(la)ka*, *wāha* (DMWA 1045, 1104); also Heb. 'ōy, 'ōyā [< /('a)+wa+y(a)], "alas!" (HG § 105.1; HAL 20);¹⁷³ Aram. *wy*, *waw:'yy*, "woe!" (GJPA § 56; DNWSI 297; DJPA 297); Syr. *wāy*, "woe!" (SG § 62; LS 185) > (w)oyō; Ethp. *way*, "woe!" (EG 115; CDG 623). This functor has also been claimed to exist in Ug. and Heb. with exclamative and vocative value, *w(a)*, "oh!" (WUS 95).¹⁷⁴

B) Coordinative functor with multiple function, additive, adversative, etc. > declarative-emphatic ... /wa/, "and" > "but"....¹⁷⁵ Akk. *u*, *wa*, "and", "also", "but" (GAG § 116.6; AHw 1397f.); Ebl. /ū/, /ū/, /wa/, /wa-a/, "and" (Fronzaroli MisEb 1 5f.);¹⁷⁶ Ug. *w*, "and", with multiple functions (UT § 12.1; PU 2 63ff.; WUS 93ff.); also as a declarative-emphatic functor;¹⁷⁷ Heb. *w^c:a*, "and", with multiple conjunctive functions (also emphatic?) (HG § 104.2; HAL 247ff.); Phoen., Pun. *w*, *u*, "and" (DNWSI 294ff.); Aram., Palm., Nab., Mand. *w*, "and" (GJPA § 55; DNWSI 294ff.; DJPA 169); Syr. *w^c*, "and" (SG § 155c; LS 184); Mand. *u-* (MD 155); Ar. *wa*, "and", "with", "also", with different syntactic constructions (GAL I 290; AEL 3048; DMWA 1044); ESA *w*, "and", "but" ..., *w* ... *w* (SG § 31.1-5; SD 154; DOSA 119); Ethp. *wa*, "and", "but", with deictic reinforcement *wa* ... *hi/ni*, *wa* ... *-ssa* (EG 411; CDG 602). There are special developments in WS.: /w/ of apodosis, consecutive and converse verbal functor.¹⁷⁸ In comp.: Ug. *wm* < /w/ + /('h)m/;¹⁷⁹ *wn* < /w/ + /('h)n/;¹⁸⁰ Heb. *w^clō'*, *w^cal* ... (HAL 249); Ar. *a-wa*, *wa-illā*, *wa-in*, *wa-law*, *wa-lakin(na)* (DMWA 1044), also *wayka*, *waylaka* < /wa+ya+(la)+ka/ (DMWR 1104); Ethp. *wa'(^c)da* (CDG 602).

For the disjunctive /'ō/, "or", we may postulate a comp.: /'a+w(a)/ > /'aw/ > /'ō/ (cf. *supra* /'a/, /'ō/)

171. Cf. GVGSS I § 254; for the multiple uses of this functor cf. also Aartun PU 2 63ff.

172. But it could be a primitive exclamation: cf. NM 604.

173. The element may be akin to Heb. *hōy*, *hō* (cf. *supra* *'h-); but it could also be a primitive exclamation; cf. NM *'hay (NM 589f.); IE *ai* (IEW 10).

174. Cf. Aartun PU 1 43f., 2 63ff.; M. Pope, "'Pleonastic' Wāw before Nouns in Ugaritic and Hebrew", JAOS 73, 1953, 95-98; Dahood, *Psalms III*, pp. 400ff., among other studies; but cf. L. Prijs, "Ein Waw der Bekräftigung?", BZ 8, 1964, 105-109.

175. Cf. C.H. Gordon, "Marginal Notes on the Ancient Middle East", JbKAF 2/1, 1951, 50-61 [IV. The Semitic conjunction wa-]; NM 603.

176. Cf. *wa*(PI), VE 195, 1217; Krebernik ZA 72 1982 221; vd. Gelb EDA 70; Hecker EDA 239-246; ARET 7 236, 238; ARET 8 68; ARET 9 409 (glossaries).

177. Cf. n. 169.

178. Cf. M.S. Smith, *The Origins and Development of the Waw-Consecutive; Northwest Semitic Evidence from Ugarit to Qumran* (HSS 39), Atlanta, GA 1991; J. Tropper, "Aramäisches *wyqtl* und hebräisches *wayyiqtol*", UF 28, 1996, 633-645. Gordon (UT § 12.9) speaks of an 'existential particle' in the case of Ug. *wn* as in the case of Heb. converse *w* as well. Cf. also G.D. Young, "The Origin of the *waw* consecutive", JNES 12, 1953, 248-252; J.F.X. Shehan, "Egypto-Semitic Elucidation of the Waw Consecutive", Bib 52, 1971, 39-43; C.H. Gordon, "The 'waw converse': From Eblaite to Hebrew", ProcAmAcJewRes 50, 1983, 87-90.

179. Cf. J. Tropper, "Ug. *wm* (KTU 3.9:6) und der Schwund von anlautenden *h* im Semitischen", UF 21, 1989, 421-423; vd. Aartun PU 2 63.

180. Cf. Tropper, UF 22, 1990, 388; vd. Aartun PU 2 63.

with suprasegmental (interrogative) connotation: “and?” > not > “another” > “or”,¹⁸¹ instead of a biconsonantal base¹⁸² (cf. at the end of this article). In any case, here we are dealing with an affirmative-explanative/ disjunctive CS and Lexical Universal immediately derived from the notion of “the same”/“other”: ‘differentiation’/‘disjunction’,¹⁸³ as against “and” (‘identification’/‘conjunction’), semantically akin to each other.

Phonologically, this functor seems to be a primary, spontaneous expression of surprise at the sight of something new, as its exclamative value shows, perhaps of onomatopoeic origin¹⁸⁴ (simple bilabial articulation), like the other deictic functors. Its later development into a conjunctive functor, related perhaps to a primary noun /w-/, either “union” or “which unites”, is not easy to explain. Perhaps we have to posit two originally different elements.¹⁸⁵

Apparent homograph:

Akk. *û*, “food” (AHw 1298); < Sum. loanword.

- *y- A) *Prepositive* exclamative, vocative functor¹⁸⁶ WS. /y-/, “oh!”, “ay!” / “ya!” // “yes!”, “yea!”; Ug. y, “oh!”, “alas!” (UT § 12.6; WUS 121f.);¹⁸⁷ Heb., Pun., Aram., y, y':h, “oh!” (DNWSI 430); Nab. 'yh [< /a+ya(+ha)/ (DNWSI 44); Aram. yh, yy', yē'way, ywy [< /ya+wa+ya/], “woe!” (GJPA § 56; DJPA 233); Syr. yō, “oh!”, yoh [< /ya+ha/(?)], “alas!”, “enough!” (SG § 62; LS 293, 298); Mand. comp. *aia* (MD 14: < /a-ia/); Ar. yā, “oh!” (GAL I 294f., II 92ff.; AEL 2973; DMWA 1104), cf. *yarasūla-llāhi, yali-llāhi*, with combinations such as: *ya'ayyuhā, yā-la-, yā-mā ...* (AEL 2973; DMWA 1104); Ethp. *ye, yo*, “oh!”, “alas!”, and repetitive *ye ye, yo yo* (EG 115; CDG 625).
 B) *Postpositive* exclamative, emphatic functor /-y/, “so!”, “yea!”: Ethp. *wa-y, sobe-ya*, “then” (EG 115; CDG 625), or perhaps an analogical expansion; Ug. -y(?), “surely!” (PU I 44ff.).¹⁸⁸

Functor of spontaneous simple semi-onomatopoeic articulation to be found in AA and in the IE families too.¹⁸⁹

181. Cf. W. Cogan, “Arabic Evidence for proto-Semitic */awa/ and */ōf/, *Language* 37/5, 1960, 60-62.

182. Cf. in this connection NM 603: *'wa:ē/*'wě, “or”, immediately followed by *'wa:ē, “and”.

183. Cf. Goddard-Wierzbicka, *Semantic and Lexical Universals*, pp. 39ff., 470ff.

184. Cf. C.T. Hodge, “Semitic b and w”, *LACUS* 18, 1991, 291-297. But its has nothing to do with onomatopoeic *wā'(wā')*; cf. AEL 2913.

185. Cf. Heb., Pun. /wa(w)/, “nail” [< /w-w:/ (?) < “that joins, secures”, also the name of this grapheme. In this connection cf. the origin of forms like /taw/, as a consequence of case morpheme accretion. Cf. in this regard the quoted /t(a) > /ta'u/ > /ta:w/, with the glottal stop serving as an illative element (see in medial position Ar.-Heb. *qā'im*) (?).

186. Cf. GVGSS I § 255; Barth, *Pronominalbildung*, pp. 89ff., 92ff.

187. For Akk. (NB) *ye* < *ē* cf. GAG § 124.13b and *supra* *'i.

188. Cf. Tropper, *UF* 26, 1994, 473-482; *MLC* 556; O. Eissfeldt, “Hebräisches *ah* und ugaritisches *ay* als Steigerungs-Affirmative”, in *Kleine Schriften*. Band V, Tübingen 1973, pp. 213-215.

189. Cf. IE *yu* (IEW 514). Related perhaps to Eg. *ī* (CDME 7; UT 407). Perhaps as a constituent of Nostratic *'ay/*'ya; cf. Bomhardt-Kerns, *The Nostratic Macrofamily*, pp. 594f.; *supra* /i/; and the personal pronoun series; cf. G. Del Olmo Lete, “The Semitic Personal Pronouns. A Preliminary Etymological Approach” (forthcoming).

Appendix: *The morphemic series*¹⁹⁰

We take 'morpheme' in the sense of an inseparable element as an integral part of the shaping of the lexical unity (syntagm)¹⁹¹ with no independent function and semantic value, while the 'functor' (also called an 'independent morpheme') is separable, although always functionally coordinated and not forming part of a lexical unity. The limit case is the pronominal suffixed morpheme that emerges from the composition of independent lexical series, as can be easily verified in the series of independent pronouns for the oblique case in Akkadian.

In this regard it would be good to take into account Brockelmann's advice: "Vielleicht lässt sich für einige Flexionsformen noch ihre Entstehung aus selbständigen Wörtern wahrscheinlich machen. Die Entwicklung der Sprache aber, die diesem Zustand etwa vorausgegangen sein mag, ist exakter Forschung nicht mehr zugänglich".¹⁹² That is to say, the morphemes of 'grammatical' composition are not lexical unities, although derivable from them in some cases; in this respect they differ also from functors; they refer back to an undefined linguistic layer,¹⁹³ which is not necessarily more ancient; their pertinence is 'semantic', not lexical. In fact the 'grammatical' organization of the language can be considered 'secondary'/'posterior' (structurally not chronologically) in relation to the 'basic'/'primary' 'lexico-semantic' organisation.

We can set out the following scheme of morphemes:

nominal:	inflected:	postpositive: gender/number/[case] ¹⁹⁴ /determinative/adverbial.
	derivative:	prepositive/postpositive
verbal: conjugated:		1) active: prepositive: person/gender/number postpositive: person/gender/number
		2) modal: reflexive/causative/passive
	derivative:	prepositive: action and actor noun

The pronominal suffixed series (postpositive in the nominal / verbal / functorial syntagm) is rather a simple, first degree syntagmatic non-morphemic series of well known semantic and lexical origin

190. On the nominal and verbal formative morphemes cf. *GVGSS* I §§ 188ff.; *ICGSL*, pp. 80ff.; J. Barth, *Die Nominalbildung in den semitischen Sprachen*, Leipzig 1894 (repr. 1967), pp.209ff.; and the in general the grammars of the main Semitic languages.

191. Cf. e. g. F. Lázaro Carreter, *Diccionario de términos filológicos*, Madrid 1971, p. 283; in the same sense, for instance, Cruse, *Lexical Semantics*, pp. 36, 45; Malkiel, *Etymology*, pp. 105ff; but cf. Moscati, *ICGSL*, p. 70, more in line with Bloomfield and Petráček ('root and lexical morphemes'); cf. *supra* n. 14. We reserve this term for the 'dependent morpheme', using that of 'functor' for the 'independent morpheme'.

192. Cf. *GVGSS* I § 101.

193. For the semantic value of morphemes cf. Cruse, *Lexical Semantics*, pp. 31f.

194. Are these really 'morphemes' or are they rather mere apophonic (vocalic) transformations? Where does the difference lie in this regard? Cf. J. Fellman, "Linguistics and pre-history: the case of Afro-Asiatic", *Anthropos* 75, 1980, 935-936; J. Callender, "Afroasiatic cases and the formation of Ancient Egyptian constructions with possessive suffixes", *AAL* 216, 1975, 95-112; G.R. Castellino, "The case system of Cushitic in relation to Semitic", *A2CILCS*, pp. 31-42; R. Hetzron, "Les affixes casuels couchito-sémitiques", *GLECS* 18-23/2, 1973-79 (1981), 219-233; H.J. Sasse, "Case in Cushitic, Semitic and Berber", in J. Bynon, ed., *Current Progress in Afro-asiatic Linguistics. Papers of the International Hamito-Semitic Congress*, Amsterdam 1984, pp. 111-126; M. Tosco, "On Case Marking in the Ethiopian Language Area (with special reference to subject marking in East Cushitic)", *SCI*, pp. 225-244; V. Christian, "Die Entstehung der semitischen Kasusendungen", *ZS* 3 (1924) 17-26; A.S. Lekiasvili, "Über die Kasusflexion in den semitischen Sprachen", *ZPhon* 24, 1971, 76-90; S. Moscati, "On Semitic Case-Endings", *JNES* 17, 1958, 142-144; C. Rabin, "The Structure of the Semitic System of Case-Endings", in *PICSSJ*, pp. 190-204.

(pronouns). In this respect, however, all the other morphemic series are of uncertain origin, except for the inflected verbal series (pre- and postpositive) which also exhibit a very likely pronominal origin.¹⁹⁵

Nominal series:

A) *Postpositive series:*

- | | |
|---------------------------------|---|
| a) Morph. of number and gender: | /-t/
/-y/ (ref.)
/-(ā)t/ |
| b) Morph. of number and case: | /-u, -i, -a/
/-ā, -ay/
/-ū, -ī/ ¹⁹⁶
/-(ā)n(u)/ ¹⁹⁷ |
| c) Morph. of determination: | /-a' (cf. <i>supra</i> functorial series *'a-, *h-)
/-m/ (mimation)
/-n/ (nunation) |
| d) Morph. of adverbial qualif.: | /-m(a:i)/ (enclitic) ¹⁹⁸
/-n/ (enclitic)
/-h(a)/ (enclitic and space/time determinative)
/-y/ (enclitic, also cumulative: /-n+y/) ¹⁹⁹
/-iš/ (enclitic) ²⁰⁰
/-t/ (enclitic)
/-u:ū/ (locative, numeral) ²⁰¹ |
| e) Morph. of derivation: | /-(ā)'/
/-(ā:ō)n/
/-(a:i)n/
/-n(-ā:a)-(t)/ |

195. Cf. L. Reinisch, *Das persönliche Fürwort und die Verbalflexion in den chamito-semitischen Sprachen*, Wien 1909; G.R. Castellino, *The Akkadian Personal Pronouns and Verbal System in the Light of Semitic and Hamitic*, Leiden 1962; G. Steiner, "Die primären Funktionen der Personalmorpheme des semitischen Verbums", *ZDMG* Suppl. III/1, 1977, 748-756; H.G. Mukarovsky, "Pronouns and prefix conjugation in Chadic and Hamito-Semitic", in E. Wolff, H. Meyer-Bahlburg, eds., *Studies in Chadic and Afroasiatic Languages. Papers from the International Colloquium on the Chadic Language Family*, Hamburg 1983, pp. 51-63; G. Böhm, "Leo Reinisch: 'Das persönliche Fürwort und die Verbalflexion in den Chamito-Semitischen Sprachen (1909)'"', in G.H. Mukarovsky, ed., *Leo Reinisch: Werk und Erbe* (SbÖAW 492), Wien 1987, pp. 251-277; G. Khan, "Morphological markers of individuation in Semitic languages and their function in the Semitic tense system", in G. Mukarovsky, ed., *Proceedings of the fifth international Hamito-Semitic congress. Bd. 2: Cushitic, Egyptian, Omotic, Semitic*, Wien 1991, pp. 235-244.

196. The 'broken' or internal plural is a grammatical apophonic phenomenon extended sometimes by /-/ or /-a, -ān/ morphemes. On the other hand, additional morphemes of determination /-m(a:i), -n/ may accompany the case morphemes quoted.

197. Peculiar to Ethiopic and Akkadian.

198. Cf. *supra* n. 141.

199. Cf. E.A. Speiser, "The Terminative-adverbial in Canaanite-Ugaritic and Akkadian", *IEJ* 4, 1954, 108-115.

200. Cf. O.D. Gensler, "Mari Akkadian iš 'to, for' and Preposition-Hopping in the light of comparative Semitic Syntax", *Or* 66, 1997, 129-156; W.R. Mayer, "Zum Pseudo-Lokativadverbialis im Jungbabylonischen", *Or* 65, 1966, 428-434; *GAG* §§ 67b, 114e; *AHW* 391: iš (-iš < from dat. pron. suf. -š); *CAD* I/J 222.

201. Peculiar to Akkadian and Ethiopic respectively, these morphemes go back perhaps to the homorganic case morpheme; cf. E.J. Young, "Adverbial -u in Semitic", *Westminster Theological Journal* 13, 1951, 151-154; K. Aartun, "Die hervorhebende Endung -w(V) in nordwestsemitischen Adverbien und Negationen", *UF* 5, 1973, 1-5.

/-m/
 /-(i)y/
 /-(a)y(a) < /ē/, /yō/
 /-(a)w(ī)/
 /-(a)y/
 /-(ō)/, /-(ō)t/²⁰²
 /-(ī:ē:ū)t/

B) *Prepositive series:*

Morph. of derivation: /'(a:i:u)-/
 /y-/
 /m-/
 /t-/
 /š-/
 /n-/

C) *Infixed series:*

Morph. of derivation: /-t-/
 /-y-/
 /-w-/

Verbal series:²⁰³A) *Prepositive series:*

a) Morph. of person, gender and number: /'-/
 /n-/
 /t-/
 /y-/
 b) Morph. of modal derivation: /'-/
 /h-/
 /y-/
 /š-/
 /(':h)t(n)-/
 /(')št/
 /(')n-/
 c) Morph. of nominal derivation: /m-/
 /t-/
 /n-/

B) *Postpositive series:*

a) Morph. of person, gender and number: /-(a)t(i:a:ā)/ (cf. pronominal series)
 /-k(u)/

202. Peculiar to Ethiopic; its possible origin from either < /-(ā)t/ or /-(ū)t/ is not clear.

203. Cf. G. Khan, "Morphological markers of individuation in Semitic languages and their function in the Semitic tense system", in G. Mukarovsky, ed., *Proceedings of the fifth international Hamito-Semitic congress. Bd. 2: Cushitic, Egyptian, Omotic, Semitic*, Wien 1991, pp. 235-244.

	/-n(ū:ā)/
	/-t(u:i)m:n/
	/-h(u:i)m:n/
b) Morph. of modal determination:	/-(u:a)/
	/-n(n)(a)/
C) <i>Infixed series:</i>	
a) Morph. of modal deverbation:	/-t-/
b) Morph. of secondary modal determ.:	/-w:y-/

A catalogue of the restricted number of non-pronominal morphemes will yield the following picture of their multiple function, with the focus of interest in this case being the kind of function (the overlap of the various functions), rather than the origin/etymology:

/-(a)-/: *prepositive* morpheme:²⁰⁴

- Nominal morpheme (> /'aqtal/).
- Causative verbal morpheme (> 'aqtala) (alt. /h:š:y/).²⁰⁵
- [Inflected verbal morpheme of 1st p. sg. (> /'aqtul/); cf. pronominal series].

/-(a)'/: *postpositive* morpheme:

- Determinative morpheme (?).²⁰⁶
- Derivative nominal morpheme.²⁰⁷

/h(a)-/: *prepositive* morpheme:

- Causative verbal(-nominal) morpheme (> /haqtala) (alt.: /š':y/).²⁰⁸

/-h(a)'/: *postpositive* morpheme:²⁰⁹

- Nominal morpheme, marker of accusative in Ethiopic in PPNN.²¹⁰
- Nominal/adverbial morpheme, marker of locative/directional case (Heb., Ug.).²¹¹

204. Although its morphemic role seems to be purely phonological (pattern), a certain 'lexical' Bs. with the value of 'enhancing' ('singling out' [adj.] <> 'causativity' [verb.]) and a possible relationship with functorial /a/ (cf. *supra*) can be discerned. The alternance /':h:š:y/ as derivative morphemes is surprising in this connection. But precisely its alternance with /h(a)/ in WS. (cf. *infra*) for the same functions (art. and caus. deverbation) points to an unconditioned, free, purely phonetic origin. Cf. A. Zaborski, "Afroasiatic formative 'a'", *AfrM* 7/2, 1974, 81-87.

205. According to Diakonoff, *Proto-Afrasian and Old Akkadian*, pp. 15, 36, 39f., the four realisations (/h/s:š/) go back to a proto-Afrasian sibilant phoneme *š ('a non-frictional dental-alveolar continuant') with no certain attestations except in pronouns and causative markers. It seems rather a *deus ex machina*.

206. It is debatable whether this morpheme is either later than / concomitant with the dropping of the case ending or an apophony (/a/) of the case ending itself: Aram. art.; WS. subjunctive verbal mode; Heb. cohort. /-'a:h/ (?). It is also possibly related to functor /-(a)h(a)/. Cf. In this regard Akk. NB -a/ā, an Aram. loan (*AHW* 2; *CAD* A/1, 1ff.).

207. Operative, above all in Ar., with III w/y bases (*mašdar* and other nominal forms).

208. Art. /h-/ is not a morpheme, but a functor of nominal origin; cf. *supra*, functorial series.

209. On its possible functorial origin cf. *supra* on morpheme /-a'-/ and /-h-/.

210. Simply the reflex of an apophonic case (ac.) ending?

211. The consonantal spelling /-h/ (Heb., Ug.) allows (?) it to be taken as a morpheme; cf. *supra* *h- in the functorial series.

/-k/: *postpositive* morpheme:

- [Inflected verbal morpheme (1st. and 2nd. p. sg.).]
- [Pronominal suf. (2nd p. sg. and pl.); cf. pronominal series].

/m(a/i)-/: *prepositive* morpheme:²¹²

- Nominal derivative morpheme (> /ma:iqta/).
- Verbal-noun derivative morpheme (inf., part.).

/-m(a/i)/: *postpositive* morpheme:

- Multiple nominal/verbal/adverbial, universal morpheme (mimation).²¹³
- Number morpheme (CS.: pl., dual).
- (In-)determination (enclitic /-m/ in Akk., Ar., Ug., ESA, Heb.).²¹⁴
- Nominal morpheme of derivation (< /qtl-m/);

/-n/: *prepositive* morpheme:²¹⁵

- Nominal-verbal derivative morpheme (> /na:iqta/).
- [Inflected verbal morpheme of 1 p. pl (and 3 sg.) (> /naqtul/)].

/-n/: *postpositive* morpheme:

- Multiple nominal/verbal/adverbial universal morpheme (nunation).
- Nominal morpheme of derivation (< /qtl-n/).
- Nominal (and verbal) morpheme of number (du. and pl. [Can.-Aram: < /m/]).
- (In-)determination (enclitic /-n/ in Ar., ESA).
- Emphatic-energetic verbal morpheme (< /yatulan(na)/).²¹⁶
- Nominal morpheme of derivation (< /qtl-n/).
- [Inflected verbal morpheme (1st. pl. [Ug. du.?)]].
- [Pronominal suf. (1st p. sg. and pl. [-na:i]; 3rd p. sg. [Ug., Heb. /-nu/ < /-n-hu/]); cf. pronominal series].²¹⁷

/š-/: *prepositive* morpheme:²¹⁸

- Causative verbal(-nominal) morpheme²¹⁹ (> šaqtala) (alt. /h:'y/).

212. The postpositive (conjunctive and emphatic) morpheme could easily be related to the homographic functor /ma/ (cf. *supra*). This is more difficult in the case of the prepositive nominal derivative; cf. K. Lahaie, "The *ma*-prefix in Afroasiatic", in E. Russell, G. Schuh, eds., *Précis from the 15th Conference on African Linguistics, UCLA, March 29-31 1984*, Los Angeles, CA 1985, pp. 186-190; F. Corriente, "A propos du préfixe protosémitique *{ma} en fonction de morphème verbal", *Arabica* 26, 1979, 189-192; W. Baumgartner, "Das hebräische Nominalpräfix *mi-*", *ThZ* 9, 1953, 154-157.

213. Cf. A. Jirku, "Die Mimation in den nordsemitischen Sprachen und einige Bezeichnungen der altisraelischen Mantik", *Bib* 34, 1953, 78-80; J. Kuryłowicz, "La mimation et l'article en arabe", *ArOr* 18-1/2 (*Mélanges Hrozny*, III), 1950, 323-328.

214. Cf. H.D. Hummel, "Enclitic *mem* in Early Northwest Semitic, Especially Hebrew", *JBL* 76, 1957, 85-107; Dahood, *Psalms III*, pp. 408ff.

215. Not traceable semantic origin except for the pronominal suf.; cf. *supra* the functorial series.

216. This morpheme could in fact be considered a functor (*-n). Cf. *PU* I 62ff., 75f., where both aspects are intermixed. V. g. verbal-energetic /-n(a)/: Ug. -n (*UT* § 9.11; *PU* 1 62f.); energetic-cohortative Heb. /-n(ʿ)/ (*HG* § 6.5d, 84.2d); Ar. -(a)n(na) (*GAL* I 61; *AEL* 2751). This element is also frequent in the Aramaic branch without special energetic value.

217. Cf. J. Retsö, "Pronominal suffixes with -n(n)- in Arabic dialects and other Semitic languages", *ZAL* 18, 1988, 77-94.

218. Untraceable semantic origin except for the pronominal suf. (cf. *supra* the functorial series). Cf. in general Fr. Rundgren, *Über Bildungen mit š- und n-t-Demonstrativen im Semitischen. Beiträge zur vergleichenden Grammatik der semitischen Sprachen*, Diss. Univ. Uppsala 1955.

219. Cf. M.M. Bravmann, "The Semitic Causative Prefix *s/ša*", *Muséon* 82, 1961, 517-522.

/-š/: *postpositive* morpheme:

- Adverbial (Akk. -iš).
- [Pronominal suf. (3rd p. sg. and pl.: Akk. /-š(v)/); cf. pronominal series].

/t(a)-/: *prepositive* morpheme.²²⁰

- Modal reflexive morpheme (< /tqt/).²²¹
- Nominal morpheme of redivation (< /taqta:īl/).
- [Inflected verbal morpheme of 2nd (and 3rd) p. sg. and pl. (< /taqtul/)].

/-(a)t/: *postpositive* morpheme:

- Nominal-verbal morpheme (genre and number) in multiple apophony (/u:i:at/).
- Derivative pronominal morpheme in Ethp. /-tu/.²²²
- [Inflected verbal morpheme (1st. and 2nd. p. sg., and 2nd and 3rd. du.)].

/-t-/: *infix* morpheme:

- Modal reflexive morpheme (< /qt/).

/-w/: *postpositive* morpheme:

- Nominal morpheme of derivation (SS. nisba /-awi/).

/y-/: *prepositive* morpheme.²²³

- Nominal morpheme of derivation: (> /yaqtal/).²²⁴
- Causative verbal(-nominal) morpheme (> /yaqtala/) (alt. /h:š:/).
- [Inflected verbal morpheme of 3rd p. sg. and pl. (> /yaqtul/)].

/-y/: *postpositive* morpheme:

- Nominal morpheme of derivation (nisba /-y/).
- Adverbial morpheme (Ug. /-y/ [?]).²²⁵
- [Pronominal suf. of 1st p. sg. (/ya/); cf. pronominal series].

* * * * *

At the end of this inquiry we can point out some facts that seem relevant in relation to the monoconsonantal series in Semitic. First the absence of the 'characteristic' Semitic phonemes: not one velarized, velar fricative or laryngeal phoneme is productive in this lexical series. And since for many reasons this series seems to be primary, one could deduce that these phonemes and in general the 'Semitic' linguistic layer is a peculiar (alien to almost all other linguistic families) and later development constructed on a non-Semitic base. Secondly, there are no monoconsonantal lexemes of the denotative (nouns) and predicative (verbs) series. This fact points to the biconsonantal combination as the basic phonological structure of the Semitic languages.²²⁶ And finally, the monoconsonantal lexemes correspond only to the

220. Not traceable lexico-semantic origin (except maybe for the inflexional verbal morphemes; cf. the pronominal series).

221. Cf. W. Diem, "Die Entwicklung des Derivation-morphemes des t-Stamm...", *ZDMG* 132, 1982, 29-81.

222. Cf. *EG* 329, as an accretion by the demonstrative /t/.

223. Untraceable lexico-semantic origin except for the pronominal morpheme (cf. the pronominal series). Its possible connection with the functor/deictic element /ya/ is uncertain (cf. *supra*).

224. Cf. L. Koehler, "Jod als hebräisches Nominalpräfix", *WO* 5, 1950, 404-405.

225. Cf. the apparent Ug. -ny (*UT* § 11.3).

226. This view is strongly opposed by Voigt, *Die infirmen Verbaltypen*, pp. 47ff, but the fact that many Semitic expansions cannot be satisfactorily explained by well-known 'Wurzeldeterminative' does not rule out their existence. Cf. in this connection Diakonoff, *Proto-Afrasian and Old Akkadian*, pp. 102f.; I.M. Diakonoff *et al.*, "Historical Comparative Vocabulary of

functorial series, (leaving out the morphemic series which does not form a lexematic series) and they go back to a layer of primary mainly deictic lexemes which appear as lexical and semantic Universals, some of them of onomatopoeic phonological origin. It is evident that this layer represents a pre-Semitic substratum in which simple articulations had lexematic value. Perhaps the morphemic series also goes back to this substratum, but its limited and multifunctional character points instead to a mere random phonetical value in the progressive grammatical articulation of the language. The impression given by these facts is that the Semitic family, as a peculiar and distinctive linguistic entity, is the result of a somewhat late and perhaps highly analogical process of evolution.

As a last question in connection with the monoconsonantal Semitic series we could inquire into the possibilities of expansion of these 'roots' by the way of 'free', i.e. non-lexical, radicals. Here we can only state the problem as a working hypothesis, although their 'pre-Semitic' origin does not seem to be very promising in this regard. An answer could only be given at the close of a general (phonological and semantic) inquiry into the whole lexical binary inventory of the Semitic languages.

One thing, on the other hand, is already clear which points in this direction: the doubling of some functors with closely related semantic value and consequent function, e.g. 'ap // *p, 'aw // *wa; 'ayy // *ya.²²⁷ Here, perhaps, we have a similar prosthetic expansion pattern (/a-/). In any case we could postulate as an 'etymological' law that "any pair of lexemes with a RSF ('relation sémantique forte') or even RSL ('relation sémantique légère') and with a homorganic articulatory base, has the same lexematic origin". For such a pairing, allowance must be made for expansions by way of either sonant and random 'strong' phonemes or already patterned morphemes.

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| BZ | Biblische Zeitschrift. Paderborn. |

Afrasian", *SPJAS* 2, 1993, 6.
227. Cf. *NM* 594.

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 CAL A.F. Rainey, *Canaanite in the Amarna Tablets. A Linguistic Analysis of the Mixed Dialect Used by the Scribes from Canaan*, vols. I-IV (HdO 1/25), Leiden 1996.
 CDG W. Leslau, *Comparative Dictionary of Ge'ez*, Wiesbaden 1991².
 CDME R.O. Faulkner, *A Concise Dictionary of Middle Egyptian*, Oxford 1981.
 DAF A. de B. Kazimirski, *Dictionnaire Arabe-Français*, Paris 1860 (repr. Beirut s.d.).
 DJPA M. Sokoloff, *A Dictionary of Jewish Palestinian Aramaic*, Bar Ilan 1990.
 DLU G. del Olmo Lete, J. Sanmartín, *Diccionario de la lengua ugarítica. Vol. I*, Sabadell (Barcelona) 1996.
 DMWA H. Wehr, *A Dictionary of Modern Written Arabic*, Wiesbaden 1966².
 DNWSI J. Hoftijzer, K. Jongeling, *Dictionary of the North-West Semitic Inscriptions, Part One/Two*, Leiden 1995.
 DOSA J.C. Biella, *Dictionary of Old South Arabic. Sabaeen Dialect*, Chico, CA 1982.
 DRS D. Cohen *et al.*, *Dictionnaire des racines sémitiques ou attestées dans les langues sémitiques*, Paris/Leuven 1970-.
 DTT M. Jastrow, *A Dictionary of the Targumim ...*, New York, NY 1950.
 EDA L. Cagni, ed., *Ebla 1975-1985. Dieci anni di studi linguistici e filologici. Atti ...*, Napoli 1987.
 EG A. Dillmann, C. Bezold, *Ethiopic Grammar*, London 1907.
Erls Erets Israel. Jerusalem.
EstBib Estudios Bíblicos. Madrid.
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 GAG W. von Soden, *Grundriss der akkadischen Grammatik, ... unter Mitarbeit von W.R. Mayer* (AnOr 33), Roma 1995³.
 GAGI D. Sivan, *Grammatical Analysis and Glossary of the Northwest Semitic Vocables in Akkadian Texts of the 15th-13th C.B.C from Canaan and Syria* (AOAT 214), Kevelaer/Neukirchen-Vluyn 1984.
 GAL W. Wright, *A Grammar of the Arabic Language I/II* (Eng. version), Cambridge 1967³.

- GJPA G. Dalman, *Grammatik des jüdisch-palästinischen Aramäisch*, Leipzig 1905 (repr. 1960).
- GUL D. Sivan, *A Grammar of the Ugarit Language*, Leiden 1997.
- GVGSE C. Brockelmann, *Grudriss der vergleichenden Grammatik der semitischen Sprachen*, B. I/II, Berlin 1908 (repr. Hildesheim 1961).
- HAL L. Koehler, W. Baumgartner, *Hebräisches und Aramäisches Lexikon zum Alten Testament*, 4 Lief., Leiden 1967-1990.
- HAM A. Salonen, *Die Hausgeräte der alten Mesopotamien nach sumerisch-akkadischen Quellen*, I/II, Helsinki 1965/1966.
- HG W. Gesenius, E. Kautsch; G. Bergsträsser, *Hebräische Grammatik*, Leipzig 1909²⁸/1918⁷ (repr. 1995).
- HSED V.E. Orel, O.V. Stolbova, *Hamito-Semitic Etymological Dictionary. Materials for a Reconstruction*, Leiden 1995.
- ICGSE S. Moscati *et al*, *An Introduction to the Comparative Grammar of the Semitic Languages*, Wiesbaden 1964.
- IEW J. Pokorny, *Indogermanisches etymologisches Wörterbuch*, I/II (= IEW), Bern/Stuttgart 1994³.
- JAC Journal of Ancient Civilisations. Changchun.
- JbKAF Jahrbuch für Kleinasiatische Forschung. Heidelberg.
- KSG Th. Nöldeke, *Kurzgefasste syrische Grammatik*, Leipzig 1898 (repr. 1966).
- LA Ibn al-Manzūr, *Lisan al-^cArab al-muhīt*, Y. Ḥayyāt, ed., Beirut 1988.
- LACUS Linguistic Association of Canada and the United States. Lake Bluff, IL.
- LeSt *Lingua e Stile: Quaderni dell'Istituto di Glottologia dell'Università degli Studi di Bologna*. Bologna.
- LS K. Brockelmann, *Lexicon Syriacum*, Halle 1928 (repr. 1966).
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- Mélanges Tisserant *Mélanges E. Tisserant*, Vol. I (Studi e Testi 231), Vatican City 1964.
- MIO Mitteilungen des Instituts für Orientforschung. Berlin.
- MLC G. del Olmo Lete, *Mitos y leyendas de Canaán según la tradición de Ugarit* (Fuentes de la Ciencia Bíblica 1), Madrid 1981.
- NM A.R. Bomhard, J.C. Kems, *The Nostratic Macrofamily. A Study in Distant Linguistic Relationship*, Berlin/New York 1994.
- PCLS Papers from ... Regional Meeting of the Chicago Linguistic Society. Chicago.
- PET M. Krebernik, *Personennamen der Ebla Texten*, Berlin 1988.
- PICSSJ *Proceedings of the International Conference on Semitic Studies in Jerusalem 1965*, Jerusalem 1969.
- PPG J. Friedrich, *Phönizisch-punische Grammatik*, Roma 1995³.
- ProcAmAcJewRes Proceedings of the American Academy for Jewish Research. Philadelphia, PN.
- PU K. Aartun, *Die Partikeln des Ugaritischen*, I-II (AOAT 21), Kevelaer/Neukirchen-Vluyn 1974/1978.
- RE *Revue d'Égyptologie*. Paris.
- Rituale G. Pettinato, *Il rituale per la successione al trono ad Ebla* (StSem NS 9), Roma 1992.
- RANL Rendiconti Accademia Nazionale dei Lincei. Roma

- RO Rocznik Orientalistyczny. Warszaw.
- RSF Rivista di Studi Fenici. Roma
- RSP L.R. Fisher, St. Rummel, eds., *Ras Shamra Parallels, I-III* (AnBib 49-51), Roma 1972/ 1975/1981.
- RSO Rivista degli Studi Orientali. Roma.
- SAU W.H. van Soldt, *Studies in the Akkadian of Ugarit: Dating and Grammar* (AOAT 40), Kevelaer/Neukirchen-Vluyn 1991.
- SCI V. Brugnatelli, ed., *Sem Cam Iafet. Atti della 7ª Giornata di Studi Camito-Semitici Indoeuropei (Milano, 1ª giugno 1993)* (Studi Camito-Semitici, 1), Milano 1994.
- SEL Studi Epigrafici e Linguistici sul Vicino Oriente Antico. Verona.
- SG A.F.L. Beeston, *Sabaic Grammar*, Manchester 1984.
- SD A.F.L. Beeston et al., *Sabaic Dictionary*, Louvain-la-Neuve/Beyrouth 1982.
- SDA R. Dozy, *Supplément aux dictionnaires arabes*, 2 vols., Beyrouth 1881 (repr. 1991).
- SemDz Semitologusii dziebani / *Studia Semitica*. Tbilisi.
- SJ G.Š. Šarbatov, ed., *Semitski jazyki / Semitic Languages. Papers Presented for the the First Conference on Semitic Languages, 126-28 Oct. 1964*, Moskva 1965².
- SP J.C. de Moor, *The Seasonal Pattern in the Ugaritic Myth of Ba'lu According to the Version of Ilmilku* (AOAT 16), Kevelaer/Neukirchen-Vluyn 1971.
- SPJAS *St. Petersburg Journal of African Studies*. St. Petersburg.
- STLB R. Weiss, *Studies in the Text and language of the Bible* (Heb.), Jerusalem 1981.
- StOr *Studia Orientalia*. Helsingfors.
- ThLZ *Theologische Literaturzeitung*. Berlin.
- UT C.H. Gordon, *Ugaritic Textbook*, Roma 1965.
- UVST J. Huehnergard, *Ugaritic Vocabulary in Syllabic Transcription* (HSS 32), Atlanta, GE 1987.
- VD *Verbum Domini*. Roma.
- VE *Vocabolario Eblaita*, vd. G. Pettinato, *Testi lessicali Bilingui della Biblioteca L. 2769* (MEB 4), Napoli 1982.
- WKAS M. Ullmann, ed., *Wörterbuch der klassischen arabischen Sprache*, Wiesbaden 1990-
- WTS E. Littmann, M. Höfner, *Wörterbuch der Tigrä Sprache*, Wiesbaden 1962.
- WUS J. Aistleitner, *Wörterbuch der ugaritischen Sprache*, Berlin 1974⁴.
- ZAL *Zeitschrift für arabische Literatur*. Wiesbaden.
- ZPhon *Zeitschrift für Phonetik, Sprachwissenschaft und Kommunikationsforschung*. Berlin.
- ZS *Zeitschrift für Sprachwissenschaft*. Göttingen.