

## Grammaticalization, Lexicalization, and Semantic Universals (The case of the primitive Semitic prepositions)

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[The system of prepositions signifies the appearance of secondary analytical system in an inflectional agglutinative language. It is normally divided in two diachronic levels: primary and secondary. Both levels have a grammaticalized nominal origin. The primary level goes back, however, to similar lexical elements and semantic universals in all the Semitic languages and it is even possible to find it in the Indo-European family. In this paper the implied grammaticalization process is analyzed.]

**Keywords:** grammaticalization, prepositions, semantic universals.

1.- In my study of the Semitic root structure I reached the conclusion that, since this language family is inflectional in nature, “autant que nous pouvons le vérifier, c’est-à-dire au niveau proto-sémitique, voire même proto-afro-asiatique, ‘au commencement était la parole’ (*horribile dictu!*), c’est-à-dire, le morphosyntagm, pas simplement la ‘racine’ ; il ne s’agit pas (dans la reconstruction du proto-sémitique) d’un stade linguistique de pure lexicalité, si celui-ci est simplement inimaginable”<sup>1</sup>. This means that grammar is present from the very beginning of the linguistic process as the organization of lexeis/meanings. This process is shaped by two complementary aspects: designation (lexematics) and coordination (grammar), namely, syntax<sup>2</sup>; or a combination of the two aspects as a compound process, which we will call “radical morphosyntax”.

So if grammar was at the beginning, then some sort of grammaticalization is a primordial and original linguistic operation. Each lexical item takes its place in the discourse, coordinates with the others, and thus ‘grammaticalizes’ itself. In an inflectional-agglutinative language, this entails going beyond the model of mere lexical distribution/juxtaposition in the discourse and developing a particular morphemic system that is not given properly at the designation level.

1. See G. del Olmo Lete, *Questions de linguistique sémitique. Racine et lexème. Histoire de la recherche (1940-2000)* (Antiquités Sémitiques 5), Paris 2003, p. 31 (There is English version, Bethesda MD 2008).

2. In the monosyllabic-isolating language family this is arrived at by the disposition of the lexemes in the discourse chain; cf. A. Amor Ruibal, *Los problemas fundamentaels de la Filología Comparada ...* vol II, Madrid 1905 (repr. 2005), pp. 387ff.; W.P. Lehmann, *Historical Linguistics*, London/New York 1997<sup>3</sup>, p. 97.

The signification/designation aspect appears in the foreground and has centred practically the attention of linguists in search of the primitive language constituents: ‘root’ reconstruction and the resulting ‘etymology’ fixation. The grammatical aspect of the primitive linguistic level remains a minor feature in this research; its basic mechanisms, apophony and inflexion tend to be considered as belonging to a second(ary) moment. While the first of the two mechanisms is intrinsic to the vocalic structure of the lexis, the second one implies an extrinsic expansion whose constituents must be sought elsewhere: in other lexeis (e. g. the pronominal verbal affixes) or in a particular kind of lexical constituents apparently created *ad hoc* (e. g. the case nominal suffixes). This is what we will call the first level of “grammaticalization”, which must be considered primordial and coexisting with primitive lexical level and its coordination in a discourse chain, namely, in a communication activity. We prefer to call it “grammaticalisation” (or grammaticality), taking into account the specific meaning grammaticalization has in modern use<sup>3</sup>.

In fact, it is to a second level of this process to which the usual name of grammaticalization is applied. So, for instance, Rubin asserts: “Grammaticalization is the change whereby lexical items and constructions come in certain linguistic contexts to *lose their lexical meaning* and serve grammatical functions ...”<sup>4</sup> It therefore starts from a previous level of lexical designation and is consequently deductive or secondary, whilst the first grammaticalization mentioned (grammatical function) was coexistent with the designation process or ‘lexicalation’ (lexico-semantic content). But just as grammaticalization is a changing process or performance that draws on the lexico-semantic body (dexeis, pronouns, nouns) in order to create ‘functors’ or ‘links’ that clarify and diversify the grammatical functions inherent in it, there is also another changing activity, that of lexicalization, intent on diversifying and widening the semantic reach of the language, basically by means of metaphor and metonymy, in an almost endlessly open process<sup>5</sup>.

So grammaticalization and lexicalization are two forms of lexical expansion, one functional/functorial, the other semantic<sup>6</sup>. Grammaticalization turns out to be a process (or move/change) of “semantic bleaching”<sup>7</sup> or voiding, but not in a complete way, so that we can talk more exactly of a process of “semantic functorization”, based on the radical equivalence of the semantic value of the lexeme from

3. See L. Campbell, R. Janda, “Introduction: Conceptions of Grammaticalization and their Problems”, *Language Sciences* 23, 2001, 93-112. A very clear exposition of what grammaticalization implies can be found in R. Voigt, “Die Präpositionen im Semitischen – Über Morphologisierungprozesse im Semitischen”, in L. Edzard – M. Nekroumi, eds, *Tradition and Innovation. Norm and Deviation in Arabic and Semitic Linguistics*, Wiesbaden 1999, pp. 29-31.

4. See A.D. Rubin, *Studies in Semitic Grammaticalization*, Winona Lake, IN 2005, p. 2.

5. See St. Ullmann, *Semántica. Introducción a la ciencia del significado*, Madrid 1986, pp. 218-266; E.F. Kittay, *Metaphor. Its cognitive force and linguistic structure*, Oxford 1987; D.A. Cruse, *Lexical Semantics*, Cambridge 1995, pp. 41-45; L. Talmy, “Lexicalization Patterns: Semantic Structure in Lexical form”, in T. Schopen, ed., *Language Typology and Syntactic Description: Grammatical Categories and the Lexicon*, Cambridge 1985, pp. 57-149; A. Caramazza, “How many levels of processing are there in lexical access?”, *Cognitive Neuropsychology* 14, 1997, 177-208; Mortureux, “Figement lexical et lexicalisation”, *Cahiers de lexicologie* 82, 2003, 11-22; P. Hanks, “Do Word Meanings Exist?”, in Th. Fontenelle, ed., *Practical Lexicography. A Reader*, Oxford 2008, pp.125-134: “Vagueness and redundancy ... are important design features of natural language” (p. 125); “... words have meaning potentials, rather than just meaning” (p. 133). On concrete application of lexicalization to prepositions see G. Rauh, “On the grammar of lexical and non-lexical prepositions in English”, in C. Zelinsky-Wibbelt, ed., *The Semantics of Prepositions*, Berlin/New York 1993, pp. 142f. (“Metaphors, lexicalization and lexical units”); Zelinsky-Wibbelt, C., “Interpreting and translating prepositions: A cognitively based formalization”, in, pp. 361-364.

6. See J. Rubba, “Grammaticalization as Semantic Change: A Case Study in Preposition Development”, in W. Pagliuca, *Perspectives on Grammaticalization*, Philadelphia 1994, pp. 81-101 The premise of this paper is that grammaticalization can be viewed primarily as a process of semantic change, with formal changes typical of grammaticalization following automatically as consequences of the semantic change” (p. 81).

7. See Rubin, *ibdm*. According to our analysis we can speak of “process”, since it “implies that grammaticalization is a force with an impetus of its own” (Rubin, *op. cit.*, p. 2), namely, that it is operative at the first and most basic level of the proto-language.

which grammaticalization starts<sup>8</sup>. Lexicalization, however, is a process of semantic transfer. Both are mechanisms of linguistic economy and many-sided componential value; at the same time grammaticalization is a performance of analysis and organization of the discourse, having reality only in it (*signifiant*). For its part lexicalization is a process of designation, namely, focused on the organization of the extra-linguistic space (*signifié*). Both override, bleach, their original semantic input; lexicalization does not, however, train “irregular phonological reduction (erosion)”, as grammaticalization does<sup>9</sup>.

2.- The presence of prepositions seems to suppose a secondary analytical system in the inflectional-agglutinative languages. In them, the inflection system takes on the function carried out by the prepositions, as can be ascertained in the adverbial functions of the inflectional system in Latin and even in the Semitic languages (local, temporal, modal, accusative, etc.)<sup>10</sup>

Seen from this point of view, two types of prepositions are usually distinguished according to the diachronic or historical level of their appearance in the language: primitive and secondary, or more precisely, first and second generation, or level<sup>11</sup>. Both take part in the same linguistic derivation: grammaticalization from lexis to functor. In case of second level prepositions the origin is patent, since their lexical elements are fully alive as such in the language. This is clear in the late “nominal prepositions” (e. g. in the spatial dimension: Akk. *šapal*; NWS *tḫt*, *qdm*, *ḥr*; Ar. *ḥawla*; Ge. *məslā*, Amh. *wəst*, *h<sup>w</sup>ala*, etc. Their coincidence in the different languages is sometimes semantic rather than lexical, so we cannot speak of “common Semitic prepositions”. In fact they correspond to the same ‘universal semantics’<sup>12</sup>, making allowances for the different lexical base.

Nevertheless these secondary nominal prepositions often coexist with the modal function of the inflected noun (normally accusative). This highlights the functionally analytical and clarifying character of the prepositions, but it cannot be said that they replace the case system, since first and even second level (grammaticalized) prepositions appeared in languages that maintained cases. So, with regard to the first level prepositions, we cannot conclusively assert that the case inflection system predated it; the reverse may be true. We can deduce that the inflectional system integrated this primary proto-analytical and semantic universal functorial system, and then developed a second level prepositional system, which was re-analytical in relation to the first level<sup>13</sup>.

The second level is also previous to the disappearance of the case system, as can be ascertained by the Akkadian, Ugaritic and Arabic languages. So this frequently expressed opinion that links the

8. See J. Rubba, *art. cit.*, pp. 81-101; Taylor, J.R., “Prepositions: Patterns of polysemization and strategies of disambiguation”, in Zelinsky-Wibbelt, *op. cit.*, pp. 151-175.

9. See Voigt, *art. cit.*, pp.31-32; Rubin, *op. cit.*, p. 4

10. See Luraghi, S., *On the Meaning of Prepositions and Cases. The expression of semantic roles in Ancient Greek*, Amsterdam/Philadelphia 2004. For the new deal in the study of prepositions in the wake of ‘Cognitive Grammar’ see C. Zelinsky-Wibbelt, “Introduction”, in id., *The Semantics of Prepositions*, pp. 1-24.

11. See in this regard Voigt, *art. cit.*, pp. 22-43. (‘1. Primäre vs. sekundäre Präpositionen’).

12. See in this regard An. Wierzwicka, *Semantics. Primes and Universals*, Oxford 1996, p. 122-126, 131-136; Cl. Goddard, An. Wierzwicka, “Introducing Lexical Primitives”, in Cl. Goddard, An. Wierzwicka, eds, *Semantic and Lexical Universals. Theory and Empirical Findings*, Amsterdam/Philadelphia 1994, pp. 31-54; e *infra* n. 48; B. Heine, “Grammaticalization and Language Universals”, in *Grammaticalisation et Reconstruction*, Paris 1997, pp. 11-23; and in general J.H. Greenberg, ed., *Universals of Language*, Cambridge Mass. 1966<sup>2</sup> (above all the contributions by H.M. Hockett, H.M. Hoenigswald, J.H. Greenberg, Ul. Weinreich, St. Ullmann, R. Jakobson).

13. We can also deduce the development in this way: positional-isolating language > first preposition level > inflectional system > second preposition level. See in this connexion I.M. Diakonoff, *Afrasian Languages*, Moscow 1988, p. 61: “these (inflectional) markers developed to case markers from prepositions (or postpositions, depending on the prevalent word order)”; in both cases of course the preposition system comes from the designative-nominal lexicon. On the contrary Voigt asserts: “Akkusativische Substantive entwickeln sich im Laufe der Zeit in bestimmten syntaktischen Kontexten zu Präpositionen ...”; cf. Voigt, *art.cit.*, p. 30.

development of the prepositional system to the disappearance of case inflexion in Semitic must be abandoned.

3.- First level Semitic prepositions (/b, k, l/) are then mono-consonantal (like most deictic and demonstrative elements), which indicates their pre-Semitic origin. In fact, the primary preposition group is common to many languages, above all in the Afro-Asiatic phylum<sup>14</sup>, but also in the Proto-Indo-European one, as we will see later<sup>15</sup>. That is to say, this subsystem belongs to the oldest or most primitive stratum of the Semitic languages preserved in its original lexical structure, while the AA phylum underwent a later lexical development that led to the tri-consonantal or virtual intensified bi-consonantal system (BIB) of the Semitic family<sup>16</sup>.

Summing up, we can say that the primary Semitic prepositional system forms a lexical group, along with those of the nominal and verbal bases, characterized by a final unconditioned vocalization in opposition to the two others: a constraint imposed by its mono-consonantal structure<sup>17</sup>. All these features hark back to a primitive non-flexional type of monosyllabic-positional-isolating language type in which they could have had a nominal function<sup>18</sup>. But such a language is for the moment completely beyond our reach and is better set aside as pure speculation. Only because the second level prepositions clearly come from the grammaticalization of the nominal system and exhibit a genitival syntagmatic government could this origin also be postulated by analogy for the primary prepositional system (b, k, l). Maybe this seems, as was said, to be the most primitive stratum of the Semitic lexicon (?) and belongs to a seemingly analytical moment of the language in which the function of the lexeis had not yet been fully developed by the case system.

In any case, leaving aside their nominal origin, those prepositions have no autonomous semantic value or any existence outside the discourse (that is to say, they are pure grammar), where they function as ‘expliciting’ functors of relation among its parts at the level of morpho-syntax (prepositions and conjunctions)<sup>19</sup>.

4.- The first thing to be noted in this sub-system is its semantic-functorial many-sided value or wide applicability. Those prepositions appear primordially as elements of analysis of the position of the lexeis in the discourse, of the dependence of one upon the other, without defining the semantic value of such a

14. Nevertheless, “in fact, any reconstruction of Afro-Asiatic stands on shaky ground, all the more so where we are dealing with elements consisting of single consonants”; see Rubin, *op. cit.*, pp. 28f.

15. Pokorny’s dictionary has been used as the reference source for PIE, while for PAA we have relied mostly on Blažek’s study, since no reliable PAA dictionary is extant in the field of prepositions.

16. See in this regard G. del Olmo Lete, “Phonetic distribution in Semitic Binary Articulation Bases”, in F.M. Fales, G.F. Grassi, eds, *Proceedings of the 13th Italian Meeting of Afro-Asiatic Linguistics Held in Udine, May 21st-24th, 2007* (History of the Ancient Near East / Monographs, 10), Padova 2010, pp. 79-86.

17. See A.R. Bomhard, *The Nostratic Macrofamily. A Study in Distant Linguistic Relationship* (Trends in Linguistics. Studies and Monographs, 74), Berlin/New York 1994, pp. 58, 111: “Only pronominal and indeclinable stems could end in a vowel”. See in this regard, I.M. Diakonoff, “Problems of Root Structure in Proto-Semitic”, *Archiv Orientalni* 38, 1970, 460; G. del Olmo Lete, *Questions de linguistique sémitique*, p. 36, 52.

18. See I.M. Diakonoff, *Afrasian Languages*, Moscow 1988, p. 68: “But in fact, ‘primary’ prepositions also derive from nominal forms”. The enclitic functorial subsystem appears to be to a certain degree of the same level, but to define its original nominal referent is still more difficult, except maybe in the case of the enclitic *-m*; see my art. “The postpositions in Semitic: the case of enclitic *-m* (with special attention to NWS)”, *Aula Orientalis* 26, 2008, 25-59.

19. See D. Leeman, “Définir une préposition: hypothèses et perplexités”, *Revue de Sémantique et Pragmatique* 2, 1997, 183-200; D. Gaatone, “Les prépositions: une classe aux contours flous”. Paper presented at the Conference Prepan 2000, la préposition dans tous ses états, Tel Aviv 2000, pp. 3-9/9. D. Gaatone “Les prépositions: une classe aux contours flous”, *Travaux de linguistique* 42-43, 2001, 23-31.

relationship except in a generic way<sup>20</sup>: this distinguished them from the second series of prepositions, which emerged precisely to cope with this semantic indefiniteness. In its turn the generic semantic value of the first series, ascertainable already in ancient languages like Ugaritic (b, l), makes clear the original nominal value of those elements, for which we can advance a provisional scheme.

/bv/	‘to be in’ (Sp. ‘estar’ <sup>21</sup> ) = locative	> ‘to arrive at’ = place <sup>22</sup> position/correlation/provenance
/kv/	‘to be’ = constitutive/durative	> ‘to last’ = time <sup>23</sup> consistency/permanency/coexistence
/lv/	‘to have’ = possessive	> ‘to belong to’ = belonging <sup>24</sup> dominion/attribution/direction to

As we have pointed out above, we are dealing here with semantic universals which each language obtains in its own way as relational functors. It would be methodologically inappropriate – circular even – to try to find a Semitic nominal/verbal ‘root’, even bi-consonantal, from which those ‘eroded’ functors could be derived, since those lexical elements should rather be invoked as the origin of such ‘expanded roots’. Thus for /b/ an origin from CS /bayt/ has been proposed, or even /bw’<sup>25</sup>.

In fact the actual semantic bearing of the the compound syntagm functor+noun is given by the verbal predicate where the semantic weight of the discourse lies<sup>26</sup>. Once that is determined, the functor points out

20. See I.-M. Visetti, P. Cadiot, “Instability and the theory of semantic forms. Starting from the case of prepositions”, in S. Feigenbaum, D. Kurzon, eds, *Prepositions in their syntactic, semantic and pragmatic context* (Typological Studies in Language, 50), Amsterdam/Philadelphia 2002, pp. 9-39: “... the promotion of a motif corresponds to a chaotically organized state, which results in trajectories inside the semantic space whose asymptotic evolution remains unpredictable” (p. 26).

21. The distinction between *ser* and *estar*, clear in Spanish and other romance languages, and of Latin provenience, has been accurately highlighted by Rubin (*op. cit.*, pp. 133ff.) in his analysis of the present time markers in Semitic. On the other hand, if the suggested etymology of Akk. *bašû*, ‘in ihm’ > ‘to be’ (cf. *AHW*, p. 112) is acceptable, it would imply a re-grammaticalization of *estar* (‘to be in’). See also Ge. *bo*, ‘there is’, Amh. *bāzza*, ‘to be’, Gu. /bāz/, ‘here’ (< /bā/ + /ze, zi/): cf. *EDG*, p. 168), and the dialectal Syrian Arabic *fi, ma fi*, ‘there is (not)’, Yemeni *bih*, ‘there is’; see Rubin, *op. cit.*, pp. 45, 62f.

22. For a critique of the conception of the overall spatial boundedness of the prepositions, which I shared, see P. Cadiot, “Schematics and motifs in the semantics of prepositions”, in Feigenbaum-Kurzon, *op. cit.*, pp. 41-57; Fr. Lebas, “The theoretical status of prepositions. The case of the ‘prospective use’ of *in*”, *ibid.*, pp. 59-73 (“the well-known debate of the ‘spatial’ status of some prepositions (among which *in*) diverges from the main issue of the status of the prepositional category itself” [p. 59]); Pratt-Hartmann, N. Francez, “Prepositions and context”, *ibid.*, pp. 115-126 (“the goal of this paper is to establish that aspectual class distinctions are also relevant to the interpretations of spatial adverbials” [p. 115]). See also Aurnague M. – L. Vieu, “A three-level approach to the semantics of space”, in Zelinsky-Wibbelt, *op. cit.*, pp. 393-439.

23. See D.S. Brée, I.E. Pratt-Hartmann, “Temporal semantics of prepositions in context”, *ibid.*, pp. 75-113.

24. See B. Heine, *Possession: Cognitive sources, forces, and grammaticalisation*, Cambridge 1997; id., “Grammaticalization and Language Universals”, in *Grammaticalisation et Reconstruction* (Mémoires de la Société de Linguistique de Paris NS V), Paris 1997, pp. 11-23 (pp. 14ff. : ‘Possession’).

25. See Voigt, *art. cit.*, pp. 37, 39-41. But cf. F.A. Pennacchietti, “Preposizioni semitiche tra diacronia e sincronia: il caso dell’arabo e dell’ebraico biblico”, *Aula Orientalis* 26, 2008, 147: “La quinta ed ultima categoria è quella delle preposizioni atone con struttura sillabica CV come arabo *li-*, *bi-* e *ka-*. Queste rappresentano lo stadio terminale della grammaticalizzazione, tanto da sfidare ogni ragionevole tentativo di risalire ad un sostantivo originario”. Other fanciful possibilities could be proposed, v. g.: \*bāna, ‘to stay in the middle’; for /k/, \*kāna, ‘to be’; /l/, \*lān, ‘to arrive at’. In relation to /b/ < /bayt/ (or better the other way round), the most appalling case is that of Amh. /bota/, ‘place’; but see also Akk. /bīt/, ‘where, when... at’; Aram. /byt/, ‘among’ (cf. *DRS*, p. 63); Palm. /bt’/, ‘among’ (cf. *DRS*, o. 90); Ar. /bata’a, batā/, ‘to stop at a place’; Gu. /batt/, ‘together’, /bettā/, ‘whence’ (cf. *EDG*, p. 162). In this connexion Diakonof, *op. cit.*, p. 68, points out: “the common Semitic preposition \*bV- ‘in’ (absent only from Akkadian and Eblaite) has its origin in Proto-Afrasian \*bV- ‘a place; to enter’” (p. 68)

26. On the most debated issue of the semantics of the prepositions see B. Pottier, “Cognitive and linguistic aspects of the expression of relation”, *Faits de Langues* 9, 1997, 29-35; R.S. Jackendoff, “The status of thematic relations in linguistic theory”,

the parts of the discourse that enter this relation and the resulting direction (applicability)<sup>27</sup>. For instance, preposition /b/ (> place) may express the relationship of situation /in/ as well as that of departure /from/ (see It. ‘da’); the preposition /l/ (motion) in its turn, may express the relationship of belonging/ownership as well as that of direction (according to the intention assigned to on the subject or the object at issue)<sup>28</sup>; the preposition /k/, the relationship of correlation, implied as much in similarity of form (‘like’) as in the contemporary nature of the event (‘when’)<sup>29</sup>. This amphiboly will disappear later in the linguistic evolution/reanalysis through the specialization of each functor in a semantic function. This can be ascertained by comparing, for instance, the prepositional system of Ugaritic with those of Hebrew, Aramaic and Arabic.

The phenomenon can still be found also in the second bi-consonantal series: /<sup>c</sup>l/, ‘(towards) on’/’from (above)’ (according to the intention assigned to the origin or in the goal of emplacement)<sup>30</sup>; /<sup>c</sup>m/, ‘(union) with’/’to (according the static or dynamic value intent in the conjunction), and so on ... In the nominal secondary series, however, the semantic value is univocal and may be idiosyncratic for each language.

	Akkadian	Ugaritic	Hebrew	Syriac	Arabic	Ge <sup>c</sup> ez
in/from	[ina]	B	bə	bə	bi	ba
as/when	kī(ma)	K	kə(mō)	ak	ka	ka(ma)
for/to	[ana]	L	lə(/’el)	lə	li(/ilā)	la

5.- If we decide not to look for a nominal etymology of those first level prepositions, we can nevertheless trace their presence in a broader lexical perspective that goes beyond the Semitic horizon.

So /Bv/ is to be found in PIE: /\*(-)b[h]i/y/, /\*-b[h]o/, ‘in’, but also implying correlation with others: “with, within”, “both”, “on both sides, around” (Gr. ἀμ-φί, ἄμ-φω, Lat. *am-bo*, Sans. *u-bhau*) and even “to, towards” (Sans. *a-bhi*)<sup>31</sup>. Its presence in PAA is also attested: /\*ba/\*bel/, ‘in’<sup>32</sup>. But it is in PS where the predominance of this preposition /\*ba/bil/ is overwhelming in the two basic pointed out semes,

*Linguistic Inquiry* 18, 1987, 369-411; Zelinski-Wibbelt, eds, *op. cit.* Also the change in the use of /l/ as a dative or accusative preposition Rubin, *op. cit.*, p. 115.

27. See in this connexion the formalisation by V. Brøndal, *Théorie des prépositions. Introduction à une sémantique rationnelle*, Copenhagen 1950; Pennacchietti, *art. cit.*, pp. 153-156.

28. Subjectivity/cognitive perception in language versus an extrinsically defined semantics; see P. Cardiot, *De la grammaire à la cognition: la préposition POUR*, Paris 1991; id., *Les prépositions abstraits en français*, Paris 1997; Visetti-Cadiot, *art. cit.*, pp. 11-15: “Perception in this sense has to be considered as instantiating a general structure of cognition, and not only as resorting to a purely sensorial and peripheral organization. As a slogan, we could say that ‘to perceive is from a single move to act and to express’. Perception already gives access to, and sketches, a meaning ...” (p. 17); P. Cadiot, “Schematics and motifs in the semantics of prepositions”, *ibdm.* pp. 41-57); but I do not share the authors’ rejection of the metaphorical transfer of meaning in all its implications.

29. See Pennacchietti, *art. cit.*, p. 154f., for the polysemy of these three prepositions; also p. 155f.: “Simile è la posizione della preposizione kā/tā dell’amarico, la quale, come ebbe a dire Prätorius abbraccia ‘die zum Teil ganz verschiedenen und einander geradezu widersprechenden Bedeutungen von, aus; bei, mit; hin, zu’”.

30. Cf. M. Dietrich, O. Loretz, “Die bipolare Position von <sup>c</sup>l im Ugaritischen und Hebräischen”, *UF* 18, 1986, 449-450; Z. Zevit, “The so-called interchangeability of the prepositions *b*, *l* and *m(n)* in Northwest Semitic”, *JANES* 7, 1975, 103-112. But see the protest against statements that Semitic <sup>c</sup>al and <sup>c</sup>le can have the ‘meaning’ of *from* by E.F. Sutcliffe, “A Note on <sup>c</sup>al, <sup>c</sup>l<sup>e</sup>, and *from*”, *VT* 5, 1955, 436-438.

31. See J. Pokorny, *Indogermanisches etymologisches Wörterbuch*, Tübingen/Basel, pp. 34-35; V. Blažek, “‘Indo-European and Afroasiatic prepositions and related words: common heritage or a result of convergence?’”, in I. Hegedüs, P. Sidwell, eds, *Nostratic Centennial Conference: The Pécs Papers*, Pécs 2004, pp. 10f.

32. V. Blažek, “Semitic Prepositions and their Afroasiatic Cognates”, in R. Voigt (Hrsg.), “*From Beyond the Mediterranean*”. *Akten des 7. internationalen Semitoamitisten Kongresses Berlin 2004* (Semitica et Semitoamitica Berolinensia 5), Aachen 2007, pp. 31f., has gathered the pertinent examples.

‘in’/‘from’. Beside the languages quoted in the above table, see also: Am. /bi<sup>33</sup>; Phoen.-Pun /b(i)/, Aram. /b-/; MAram. /b<sup>e</sup>-/; Sab. /b-/; Meh., /ba-/; Jib. /b-/; Har. /b(e)-/; Soq. /be-/ (“preposition dont les sens sont très variés”; cf. *LS*, p. 79); Ge. /ba/, Tig., /əb/; Tigñ./b(a)/; Amh. /bä-/; Gu. /ba-/; ‘in’ (cf. *DRS*, p. 39)<sup>34</sup>.

/Kv/ in its turn appears in the first place in PIE as a demonstrative pronoun ítem: /\*k<sup>h</sup>]e-/\*k<sup>h</sup>]o-, \*k<sup>h</sup>]i-, of deictic origin, with which our preposition may have a genetic relationship<sup>35</sup>, as well as /kǎ, ke, kom/, “Partikel, vielleicht etwa, ‘wohl!’”<sup>36</sup>. But more specifically we have PIE /\*k<sup>w</sup>]e-/\*k<sup>w</sup>]o-, \*k<sup>w</sup>]i-, “stem of interrogative and relative pronouns”; and /\*k<sup>w</sup>]ay/, ‘when, as,...’ “derivative from the preceding”<sup>37</sup> (Lith. *kaĩ*, OChSl *cě*). In PAA we have Eg. /k, ky/, ‘other’ > ‘also, moreover’<sup>38</sup>. In PS the basic meaning “as, like” of /k/ (also Ebl. /kà/; Phoen.-Pun. /k-/; Aram. /k<sup>e</sup>, ki/; Sab. /k-/; Meh., Hob., Har., Jib., Soq. /k-/; ‘in [time]’)<sup>39</sup>, is linked to such primary PIE elements and to the development \*demonstrative > \*interrogative in the same field of quantification<sup>40</sup> and comparison (‘so, as, how’): /\*k[h]a-m/, ‘how much?’ (Ug., Heb., Phoen., Aram., Syr., Ar.; Sab. /kam/; Har. /kem/, Meh. /kəm/, Soq. /kəm/; Ge. /kämä/, Tig. /kəm/, Tigñ. /käm/, Amh. /kämä/, Gu. /kăma/; see Gu. /ka/, ‘that’ (*EDG*, p. 331).

Finally, /Lv/ must be also related to the PIE demonstrative pronoun stem /\*’ol/ (Lat. *ōlim, ole, olle, olus, ollus*, ‘that’, Umb. *ulo, ulu*, ‘there, at that place’, OChSl \**ol-nei* > *lani*, ‘last year’)<sup>41</sup>; also found in PAA: /\*’al-’el-<sup>42</sup>; while its predominance in PS as a demonstrative pronoun stem /\*’illa, \*’illay, \*’ul(l)a/ is well attested, above all as pl. form (Ak., Heb., Phoen., ESA Sab., Ar., MSA Soq., ETH Ge., Tig., Amh., Gu.) so there is no need to go into detailed quotation. So we can confidently assert that functor /l(v)/ is related to this proto-lexeme<sup>43</sup>.

There is, however, a discordance in this frame: the absence of functors /b/ and /l/ in Akkadian. Instead we have /ina/ for ‘in’ and /ana/ for ‘to’. Both have, nevertheless, a good and manifest PIE and PAA pedigree: /\*’en/, ‘in, into, among’ (Lat. *in*, Gr. *ἐν, ἐνι, ἐνί*, OI *ini-*, Goth. *in*, OE *in*, OHG *in*<sup>44</sup>; Eg. /’in/, ‘in’<sup>45</sup>. In this case PS shows the often highlighted curious coincidence<sup>46</sup> between ES (Akkadian) and SS (Ethiopian): Akk. /ina/, ‘in, from’; Ge. /’ən-ta/, ‘through, into, in the direction’, Tig. /’ət/, ‘on, in’<sup>47</sup>.

33. Cf. I. Gelb, “La lingua degli amoriti”, *ANLR* 13, 1958, 163.

34. The original semantic amphiboly and vagueness of this relational functor is patent in almost all the Semitic languages; cf. for instance E.-A. Gutt, “The Silte Group (East Gurage)”, in R. Hetzron, ed., *The Semitic Languages*, London/New York 1997, p. 514: ‘in, with: instrument, source, location, detrimental’.

35. See Pokorny, *op. cit.*, pp. 609-610.

36. See Pokorny, *op. cit.*, pp. 515-516. This value is well known in North-West Semitic. See among others P. Gordis, “The asseverative Kaph in Ugaritic and Hebrew”, *JAOS* 63, 1943, 176-178.

37. See Pokorny, *op. cit.*, p. 519; Blažek, “Indo-European and Afroasiatic”, pp. 11f.

38. See *CDME*, 283 (/kə/, ‘so, then’), 285 (/ky/, ‘other, another’); Blažek, “Afroasiatic cognates”, pp. 33f. We will not consider the question of the origin of the functor/conjunction /kī/, ‘for, because, when, if ...’. We regard it as a byform or re-grammaticalization of the functor /k-/; Akk. *kī*, ‘according, concerning’ could be a good preceding link.

39. In this way the ‘temporal’ semantic connotation is made patent in this primary functor (‘to be’ < ‘to last’).

40. Cf. Wierzwicka, *op. cit.*, pp. 126-129.

41. See Pokorny, *op. cit.*, pp. 24-26.

42. See Blažek, *art. cit.*, pp. 24f., 34f.

43. See Rubin, *op. cit.*, p. 74, 94 in connexion with the article /al-/ and the *nota accusativi* /l-/. Even the polysemic Amh. /allä/, ‘to be ...’, goes back to this functor.

44. See Pokorny, *op. cit.*, p. 311; Blažek, *art. cit.*, pp. 3-5.

45. See Blažek, “Afroasiatic cognates”, pp. 26f. Voigt, *art. cit.*, pp. 41-42, derives it from a  $\sqrt{\text{UM}}$ ?, ‘Zeichen geben’, Eg. /m, jm/, ‘in’ – See also Sum. en, ‘as far as, to, with’; Fr. Delietzch, *Sumerischers Glossar*, Leipzig 1914, p. 35 (en-na, ‘solange as, während’); *ePSD* (en-na, ‘until’).

46. See in this connexion A. Gai, “Prepositions-conjunctions in Akk. and Ge<sup>e</sup>ez”, *ZA* 75, 1985, 210-230.

47. For a different etymological proposal for Ge. /’enta/ see Rabin, *op. cit.*, p. 116, n. 88 (= acc. marker /’et/).

As for Akk. /ana/, ‘to’, see PIE: /\*an-/ ‘to, towards’<sup>48</sup> (Sans. *ánu*, ‘with, along’, Av. *ana*, ‘along, on’, OP *anu-*, ‘along’, Gr. *ἄνα, ἄνά*, ‘on, upon, along’, Goth. *ana*, ‘in, to’, OHG *an, ana*, at, on’)<sup>49</sup>; PAA: Eg. /n/ ‘for’<sup>50</sup>; while in Semitic it appears only in Akk, Ebl. and South-Semitic<sup>51</sup>.

This means that there is a semantic coincidence among the Semitic languages in the *universal semantic* /in/ and /to/ within the manifold *lexical* possibilities. In this case, then, we can deduce that the grammaticalization is clearly the consequence of the semantic constraint<sup>52</sup>.

6.- In the case of /k/ there is general agreement among all the Semitic languages for its use as a functor of equivalence in form and time (‘like, how ... according’/‘when’; see Lat. ‘*quo[-modo], quum/cum*’) and also in its derivation from a demonstrative element (> ‘that’ > ‘the same’ > ‘the coetaneous’; see above), a kind of grammaticalization widely certified in the formation of the article in Semitic (< /hn-/)<sup>53</sup>. The demonstrative lexeis are easily turned into functors because of their general deictic value<sup>54</sup>, and can develop a many-sided semantic relationship between the parts of the discourse.

As seen above, the functor /l/ also emerges from a deictic-demonstrative element (deixis implies pointing, i. e., direction), widely documented in PIE and of course in PS with an univocal value, present also in the grammaticalization of the Semitic article (Ar. /al-/)<sup>55</sup>. The specialization of this functor is in the field of attribution and consequent ‘intention’ and ‘motion’ (‘to, towards’), in clear accordance with its demonstrative value (‘that’ > ‘that of’ > ‘that to’).

Only the functor /b/ seems not to derive from a demonstrative element and, although well attested in PIE and WS, this may be the reason for the divergent realization of the same universal semantic (‘situation in a place’) between ES and WS, each branch assuming one of the two possible ‘functorial’ non-demonstrative elements (/in/ # /b/). But both in this case and in the case of the demonstrative element we cannot go any further back in the identification of the nominal element from which it could derive<sup>56</sup>.

7.- Summing up, in the primary Semitic functorial series (/b, k, l/) we find the convergence of three basic linguistic processes. First, the configuration and wording of three elementary *semanticuniversals* (location, consistence, motion > place, essence, time) that link the sequence/relation of the lexeis in the discourse chain, thus mirroring the situation in the extra-linguistic world and their perception by the human mind.

Secondly, the *grammaticalization* of previous pronominal/nominal elements of a demonstrative, that is to say, a generic and ‘bleached’ semantic value as the best suited for expressing those primary and many-sided relations, thus releasing them from their original nominal function and semantic value. A question can be raised in this connexion: does this grammaticalization belong in the above mentioned original ‘grammar’ inherent in language from the very first organization of meaning, or does it correspond

48. See Pokorny, *op. cit.*, 39-40.

49. See Pokorny, *op. cit.*, p. 39-40.

50. For Ed. Lipiński, *Semitic languages. Outline of Comparative Grammar* (OLA 80), Leuven 1997, p. 462, /l-/ and /ana/ “are best explained by a basic ‘in/l-’ preposition, with dialectal variants”. See also Blažek, *art. cit.*, p. 25 and 34, as far as Egyptian /n/ in concerned.

51. See Testen, D.D. “Cognates to the Akkadian *ana* in Ethiopia and South-Arabia”, in Bender, L., Tákacs, G., Appleyard, D., eds, *Selected comparative-historical Afrasian linguistic studies: in memory of Igor M. Diakonoff*, München 2003, pp. 241-155.

52. See Cl. Goddard, “Semantic Theory and Semantic Universals”, in Goddard-Wierzwicka, *op. cit.* (n.12), p. 13: “Every semantically primitive meaning can be expressed through a distinct word, morpheme or fixed phrase in every language”.

53. See Rubin, *op. cit.*, pp. 72ff.

54. On deixis in general see J. Lyons, *Semantics*, Cambridge 1977, pp. 636-724 (ch. 15: ‘Deixis, space and time’); S.C. Levinson, *Pragmatics*, Cambridge 1983, p. 54-96 (ch. 2: ‘Deixis’).

55. Cf. Rubin, *op. cit.*, p. 77ff., 84ff.

56. See above n. 21 on the existential use of /b+pers. suf./ in Semitic.

to a ‘later’ moment of the organization of the discourse? Could a discourse be generated without such functors? Was the inflexional system, or for the case the positional linguistic model, able to cope with all these functions?

Thirdly, this primary grammaticalization process opened up the way and provided the model for the later *lexicalization* process by which language found the way of developing *ad infinitum* on the basis of its own lexical score, without resorting to the creation of new lexemes. The change of meaning based in the many-sided relationships that link the realities of the extra-linguistic world by resemblance and functionality gives birth to polysemy, expanding the dictionary without multiplying the lexicon.

We can say that with this elementary functorial subsystem we have reached the greatest time depth achieved so far in historical linguistics<sup>57</sup>.

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DRS	Cohen, D., <i>Dictionnaire des racines sémitiques</i> , I-II, Paris/Leuven 1970-
EDG	Leslau, W., <i>Etymological Dictionary of Gurage</i> , Vol. III, Wiesbaden 1979.
ePSD	<i>Electronic Pennsylvania Sumerian Dictionary</i> (on line).
WÄS	Ermann, A. – Grappow, H., <i>Wörterbuch der Aegyptischen Sprache</i> , 5. B., Berlin 1982.

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57. See in this regard C. Renfrew, A. McMahon, & L. Trask, eds, *Time Depth in Historical Linguistics*. Vols. 1-2, Cambridge 2000. Very few other phonemes show themselves productive as monoconsonantal lexemes (/ʔ(a:i), d:q:z, p/), the rest, mostly as reduced morphemes (/ʔ(a), h, m, n, t, w/). In any case laryngeal-pharyngeal and glottalized (‘emphatic’) phonemes are completely unproductive in this regard, making clear their innovative origin in Semitic; see G. del Olmo Lete, “The Monoconsonantal Lexical Series in Semitic”, *Aula Orientalis* 16, 1998, 37-75.

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