## Paradigmatical Semantics:

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0. The concept of "paradigmatical semantics" is not a standard notion in modern linguistics. It is absent from the index of Lyons's excellent manual Semantics, as well as from the works of Leech and Kempson¹. However, Lyons's book deals explicitly, in volume I, with the notion of "Paradigmatic relationship". The account given there explicitly refers to the notion of substitution², and discusses the complementarity between selection and combination³. We touch here the fundamental dimensions of language, as a relational build-up of signs: a "combinatory" dimension, involving combinations between elements (and restrictions affecting these combinations), and a "connective" dimension, involving a series of non-sequential relations (e.g., substitution, association) between elements. It was Ferdinand de Saussure who identified this twofold dimension, positing a distinction between rapports syntagmatiques and rapports associatifs⁴. Saussure's terms were later replaced with

<sup>1</sup> See J. Lyons, Semantics, London, 1978; G. Leech, Semantics, Harmondsworth 1974<sup>2</sup>; R. Kempson, Semantic Theory, London 1977.

In the semantic study of Biblical Hebrew, the focus of attention has been on lexical semantics; see J. Barr, Semantics of Biblical Language, Oxford 1961; B. Kedar, Biblische Semantik: Eine Einführung, Stuttgart 1981; M. Silva, Biblical Words and their Meaning, Grand Rapids 1983.

<sup>\*</sup> This is a thoroughly revised and condensed version of the paper presented at the Workshop on June 29; it incorporates the useful comments made by the participants. Special thanks are due to Prof. E. Jenni, Prof. J. Hoftijzer and Prof. U. Rüterswörden for their comments.

<sup>&</sup>lt;sup>2</sup> "The paradigmatic relations contracted by units are those which hold between a particular unit in a given syntagm and other units which are substitutable for it in the syntagm. For example, "old" is paradigmatically related with "young", "tall", etc. in expressions like "the old man", "the young man", "the tall man", etc., as "man" is paradigmatically related with "woman", "dog", etc. in expressions like "the old man", "the old woman", "the old dog", etc. Similarly, the letters *i*, *e* and *a* are intersubstitutable for one another in the word-forms *pit*, *pet* and *pat*" (Lyons, Semantics, vol. I, p. 241).

<sup>&</sup>lt;sup>3</sup> "The set of paradigmatically related, or intersubstitutable units that can occur in one position is typically different from the set of units that can occur in another position. We identify units by virtue of their potentiality of occurrence in certain syntagms; and the selection of one element rather than another produces a different resultant syntagm. To describe a language-system is to specify both the membership of the paradigmatic sets and the possibilities of combination of one set with another in well-formed syntagms. Looked at from this point of view, languages can be seen, at each level of analysis, as having two dimensions, or axes, of structure; and every unit has its place at one or more points in the two-dimensional structure" (Lyons, Semantics, vol. I, p. 241).

<sup>&</sup>lt;sup>4</sup> "Linearity precludes the possibility of uttering two words simultaneously. They must be arranged consecutively in spoken sequence. Combinations based on sequentiality may be called *syntagmas*. The syntagma invariably comprises two or more consecutive units: for example, *re-lire* ("re-read"), *contre tous* ("against all"), *la vie humaine* ("the life of man"), *Dieu est bon* ("God is good"), *s'il fait beau temps, nour sortirons* ("if it's fine, we'll go out"). Outside the context of discourse, words having something in common are associated together in the

the pair "syntagmatic/paradigmatic"<sup>5</sup>, the latter referring to a non-linear, or categorial, organization of elements which can be substituted for each other or significantly contrasted in a given context.

In line with the most common acceptation of the term "paradigm", I would define "Paradigmatical semantics" as the study of the semantic content of

(a) all types of structures which are recurrent throughout a class of items

(b) the relationships which connect a particular item with a set of environments, or which can be discovered between different sets of forms not contrasting in the same environment.

Within this view, there is no fundamental dividing-line between semantics and grammar: grammatical categories/structures also have a semantics, which can be fitted into a paradigmatic frame. Such a position allows us to adopt, as a methodological tool, a distributional approach in a consistent way: we are interested in the co-occurrence, and restrictions (partial or total) on co-occurrence, between elements of a linguistic system. Also, the notion of paradigm will be applied to any kind of linguistic structure: syllabic formants, discontinuous morphemic patterns, combined patterns, and constituted lexical items. In this view, therefore, paradigmatical semantics is not annexed to grammar, but is an integrated part of the grammatical description of a language; moreover, it can (or should) be studied with the same distributional method as linguists have been using for phonology and morphology.

1. Within paradigmatical semantics we will do well to distinguish between

(a) a semantic analysis of terms, patterns, and units

(b) a so-called "semantic" analysis of the content of terms.

It has been customary to speak of "semantic analyses" with reference to studies, e.g. by Pottier, Greimas, of semantic fields in terms of "classematic" features<sup>6</sup>. A well-known example is the analysis of the French terms for various types of seats: *chaise*, fauteuil, canapé, sofa, etc. The features extracted from the analysis of terms are, however, not given within the linguistic system: they are features which can be ascribed to the referents (or prototypical referents) of the terms. The only valid linguistic conclusion that can be drawn from such an analysis does not concern the semantic structure of the language (or, better, of a lexical subsystem): it concerns

memory. In this way they form groups, the members of which may be related in various ways. For instance, the word enseignement ("teaching") will automatically evoke a host of other words: enseigner ("to teach"), renseigner ("to inform", etc); or armement ("arming"), chargement ("loading") etc.; or éducation ("education"), apprentissage ("apprenticeship"). All these words have something or other linking them ... Syntagmatic relations hold in praesentia. They hold between two or more terms copresent in a sequence. Associative relations, on the contrary, hold in absentia. They hold between terms constituting a mnemonic group" (F. de Saussure, Course in General Linguistics, tr. R. Harris, London 1983, p. 121-122).

<sup>5</sup> See L. Hjelmslev, Omkring sprogteoriens grundlaeggelse, København 1943.

<sup>&</sup>lt;sup>6</sup> Called sèmes, or classèmes, or virtuèmes. See B. Pottier, Vers une sémantique moderne, Travaux de Linguistique et de Littérature 2, 1964, 107-137; A.J. Greimas, Sémantique structurale, Paris 1966.

the lexematic filling-up (or articulation) of a domain of experience, as it can be logically dissected.

2. The view I will adopt here is that a *linguistically relevant semantics* is only possible if one takes into account linguistic *form*, as a recurrent structure which occupies, in a significant way, a particular *position* within the linguistic system. This also implies that the notion of *paradigm* will be taken here to be *formally* grounded; I admit that there may be interesting topics of study starting from an ontologically or conceptually defined notion of paradigm (e.g., for the study of kinship terms or of colour terms, or for the study of (near-)synonyms and opposites), but I fail to see their linguistic relevance when they are not based on the inspection of linguistic form.

As a consequence we will not deal here with the keynotions of what is commonly called "structural semantics", viz. synonymy, antonymy, hyponymy, hyperonymy. Synonymy and antonymy are undoubtedly relations which can be construed between elements belonging to the same paradigm; in fact, parallel formations can be shown to be (almost) synonyms, and such cases they are of course very important for the linguist. The importance lies in the fact that we find here twofold evidence for the arbitrariness of linguistic signs:

(a) More closely related formations (maqtal/maqtil) may differ in meaning: an interesting case in point is mar  ${}^{3}eh$  vs. mar  ${}^{3}\bar{a}h$  of the root r  ${}^{3}h$ .

The first word mar <sup>3</sup>eh (always in the singular) basically refers to the exterior visual aspect:

1 Sm 17,42 'im y peh mar'eh with a handsome appearance"

1 Sm 16,7 'al tabbēt 'el marēhū "do not look upon his appearance"

Gn 46,2 wayyō mer selōhīm leyiśrā ēl bemar ōt hallaylāh wayyō mer ya aqōb ya aqōb "and God said to Israel in a vision by night "Jacob, Jacob"

1 Sm 3,15  $u\tilde{s}^e m \bar{u}^{\ 2} \bar{e}l \ y \bar{a} r \bar{e}^{\ 2} \ m \bar{e}h agg \bar{\iota}d$  'et hammar 'ah 'el ' $\bar{e}l\bar{\iota}$  "and Samuel was afraid to tell the vision to Eli<sup>48</sup>

Ex 38,8 wayya as  $\bar{b}$  thakkiyy $\bar{b}$  n hošet  $\bar{b}$  than  $\bar{b}$  hošet  $\bar{b}$  mar  $\bar{b}$  thas  $\bar{b}$   $\bar{b}$  as  $\bar{b}$  that  $\bar{b}$  as  $\bar{b}$  and its stand he made of bronze out of the mirrors of the women who were on duty at the entrance to the Tent of the Presence.

(b) Less closely related formations may be seen as coinciding in meaning: e.g. mrbyt/trbyt "increase, interest".

Data such as these raise the unavoidable question: how do we know whether two terms are synonymous? For instance, are yšw h and tšw h synonyms in Biblical Hebrew? And if not, what is the difference between the notion of "salvation" (if that

<sup>8</sup> See also Nu 12,6 and the syntagm "vision of God" in Ez 1,1; 8,3; 40,2.

<sup>&</sup>lt;sup>7</sup> See also Gn 2,9; 12,11; 24,16; 26,7; 29,17; 39,6; 41,2-4; Jd 13,6; Is 52,14; and note the expression *lo* \*mar \*eh \*\*, insignificant\*, Is 53,2.

is the proper translation!) expressed by  $y \delta w^c h$  and that expressed by  $t \delta w^c h$ ? In fact, a close scrutiny of so-called synonyms often reveals a semantic difference:

"The terms מְחֵלֵּלִיים and חַחְלֵּאִים, deriving from HL'/Y mean ,illness(es), disease(s)', but the *mqtl* form has reference to illness resulting from the effects of wounds (2 Ch. 24:25), whereas the *tqtl* form refers to illness resulting from the ravages of hunger (Jer. 14:18; 2 Ch. 21:19)."<sup>10</sup>

This leads to another problem: where are we to draw the line between basic meaning and contextual meaning? If no decision is taken, it seems very difficult to assess the notion of synonymy on solid grounds; and more generally, all lexicographical work is compromised.

It is even less clear what should count as antonymy, hyponymy or hyperonymy on purely formal grounds: we can easily construct logical relationships of different types (e.g., a symmetrical relation of identity which is transitive, in an open domain [= SYNONYMY]; a symmetrical relation of opposition, within a closed domain [= ANTONYMY]; a non-symmetrical transitive relation of inclusion, in an open domain [= HYPERONOMY] and its converse [= HYPONYMY]), but in what way is this a linguistically relevant analysis of Hebrew?

The last question raises the fundamental problems to be dealt with by any approach to the paradigmatic semantics of any natural language:

(I) How is meaning constituted?

(II) What kind of account do we want to give of meaning?

3. The problem of *meaning*-constitution is an intricate one, in that several options are open to the investigator. One of them is to look for the *meaningful* units within the lexicon, and the approach which I would favour here is a *taxonomic* one, based on observed usage, and not an a priori logical decomposition. Let me give as an example the Biblical Hebrew word *tp*. Gesenius-Buhl translate it as "die kleinen Kinder"; in Koehler-Baumgartner's *Lexicon* it is translated "those of a nomadic tribe who are not able to march". In HAL³ two translations are juxtaposed: "kleine Kinder" and "die nicht od. wenig Marschfähigen d. wandernden Stammes". The term is interesting, given that its *signifié* seems to correspond to a segmentation which is unparalleled in the Indo-European languages. But if we look into the texts, we note, among other things, the following:

(1) very often, there is not the slightest connection with a nomadic setting: e.g.,

Dt 3,6 hhrm kl cyr mtm hnšym wht p11

(2) in many cases, the word *tp* is found in a juxtaposing chain, which contains words such as "men", "women", and "aliens", e.g. Nu 31,9 ("the women of Midian and their infants"), Dt 31,12 ("the people, men and women and the little ones, and your

<sup>&</sup>lt;sup>9</sup> This question is *not* answered by J. Sawyer, Semantics in Biblical Research. New methods of defining Hebrew words for salvation, Stocksfield 1972.

<sup>&</sup>lt;sup>10</sup> See B. Waltke – M. O'Connor, An Introduction to Biblical Hebrew Syntax, Winona Lake 1990, p. 91 (with reference to S. Gevirtz, Formative y in Biblical Hebrew, Eretz-Israel 16, 1982, 57-66); see also their remarks on t h amd m h.

<sup>&</sup>lt;sup>11</sup> Cf. Dt 2,34 wnlkd 't kl 'ryw b't hhw' wnḥrm 't kl 'yr mtm whnšym whṭ p and Esth 3,13 wnšlwh sprym byd hrṣym 'l kl mdynwt hmlk lhšmyd lhrg wl'bd 't kl hyhwdym mn'r w'd zqn ṭ p wnšym.

stranger who is within your gates"), Jos 8,35 ("women, little ones and aliens"), Jer 40,7 ("men, women, and children"), Jer 41,16 ("men (…), women, children and eunuchs"), Jer 43,6 ("men, women, and children").

(3) tp is often found in contexts, in parallelism, with bnym where it seems to refer to younger children who are not capable of providing for their own nourishment

(cf. Jer 40,7); e.g.

Nu 16,27 wdtn w byrm yş w nsbym pth hlyhm wnsyhm wbnyhm wt pm Dt 1,39 wt pkm sr mrtm lbz yhyh wbnykm sr l yd w hywm twb wr 12

This explains why the use of tp (contrasted with bnykm in Dt 1,39) seems to involve the responsibility assumed by the family or a member of the family; in Gn 50,21 Joseph promises to his brothers that he will nourish them and their little ones:  $^2nky$   $^2klkl$   $^3tkm$  w  $^2t$  tpkm

Such an interpretation, involving the notion of responsibility for a group of relatives unable to provide for their own nourishment, receives support from the following

facts:

(A) tp is used in conjunction with notions such as "livestock, flock": Ex  $10,24 \ rq \ s$  " $nkm \ wbqrkm \ ysg \ gm \ tpkm \ ylk$  "mkm "only leave your flocks and your herds behind; your tp may go with you" Nu  $32,16 \ gdrt \ s$  " $n \ nbnh \ lmqnnw \ ph \ w$  " $rym \ lt \ pnw$  "we will build sheep-folds here for our livestock, and cities for our tp" Jd  $18,21 \ wypnw \ wylkw \ wysymw$  " $t \ htp \ w$  " $t \ hmqnh \ w$  " $t \ hkbwdh \ lpnyhm$  "and they departed, and put the tp and the live-stock, and the valuables before them"

Nu 32,26 tpnw nšynw mqnnw wkl bhmtnw yhyw šm b ry hgl d "our tp, our wives, our flocks, and all our cattle shall be there in the cities of Gilead"

(B) in Jos 1,13-14 *tp* is included among the "gifts of God": wntn lkm <sup>2</sup>t h<sup>2</sup>rṣ hz <sup>2</sup>t nšykm tpkm

(C) the expression *lpy htp* indicates the number of family members for whom responsibility is assumed:

Gn 47, 12 wyklkl ywsp  $^3t$   $^3byw$  w  $^3t$   $^3hyw$  w  $^3t$  kl byt  $^3byw$  lhm lpy htp "Joseph provided with bread the entire family of his father, according to the number of the tp".

In conclusion, it seems better not to adopt as a general translation for tp "those incapable of marching with the caravan", a meaning or, better, gloss which receives support only from Gn 46,5

wyś w bny yśr l t y qb byhm w t tpm w t nšyhm b glwt šr šlh pr h lś t w and maybe also from Jd 18,21 (quoted above) and Ex 12,37

wys 'w bny yśr 'l mr 'mss skth kšš m'wt 'l p rgly hgbrym lbd mtp

The account given here of the *meaning-constitution of tp* may have shown that paradigmatical semantics is (or should be) the result of distributional analysis – a distribution which can involve the juxtaposition or combination of elements which belong, in one or the other respect, to the same paradigm (in the present case, the

<sup>&</sup>lt;sup>12</sup> Cf. Gn 43,8; Gn 47,12; Gn 47,24; Jd 21,10.

paradigm of nouns referring to social groups with a particular status). Now, this is one way of approaching, in an a posteriori move, the problem of meaning-constitution. The second way is to interpret *meaning-units* within their anthropological or ethnographical setting, an option which necessarily involves a comparative approach. Here again, the approach to be taken should be an a posteriori one, and we should do well to label our categories as objectively as possible. Methodologically, we can rely here on studies involving componential analysis (in terms of ethnographic implementation), such as those of Lounsbury and Goodenough<sup>13</sup>. It also seems to me that such an approach will shed interesting light on etymological research. As an example, I would like to take the noun *leḥem* in Hebrew, the semantics of which should be replaced in its cultural setting, through a comparative analysis within Semitic<sup>14</sup>.

In Akkadian the root *lêmu* (*le³āmu*; *laḥāmu - leḥēmu*) means "to take, to absorb"; it is used with the objects "bread" (*akalu*), flesh (and meat: *širu*, *šumu*), water (*mu*, pl. *mê*), or salt (*tabṭu*). The verb has no derived substantive attested with the meaning "food".

In the North-West Semitic languages the root *lḥm* is also attested. In Ugaritic we have a verb *lḥm* which means "to eat" (in the Qal) and "to feed" in the Šafel; there is also a substantive *lḥm* attested with the meaning "food", mostly "bread". In Hebrew we have a verb *lāḥam* which means "to eat", "to taste" and "to feed" (all in the Qal), next to a homophonous root *lḥm* which means "to get in touch with, to fight". Hebrew also has a noun *leḥam* meaning "flesh, body", and a noun *leḥam* meaning "bread, food", but never "meat". In Punic and in Aramaic the root is attested under the form of a noun meaning "food, victuals" (in Syriac also with the meaning "a cake or loaf of bread").

The situation in South Semitic forces us to adopt a flexible semantics, which is not referent-focused. In Classical Ethiopic  $l\bar{a}hem$  means "ox, cow". In Tigre the root occurs in two substantives:  $l\bar{a}hmi$  ("cow") and  $l\bar{a}ham$  (a huge tree with eatable fruits). In Amharic  $l\bar{a}m$  means "cow". In the South Arabian language of Soqotri lehem means "fish, big fish, shark". In Arabic the root lhm occurs in verbal and nominal formations. The verb lahama means "to feed somebody with meat, to sell meat", and lahima means "to feed oneself with meat, to be carnivorous, to be fleshy, to use meat as bait". (A nominal derivation  $lahh\bar{a}m$  means "butcher".) The substantive lahmu means "flesh, meat, pulp of a fruit", never "bread".

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<sup>&</sup>lt;sup>13</sup> See, e.g., W.H. Goodenough, Componential Analysis and the Study of Meaning, Language 32, 1956, 195-216; W.H. Goodenough, Componential Analysis, Science 156, 1967, 1203-1209; W.H. Goodenough, Componential Analysis, International Encyclopedia of the Social Sciences vol. 3, New York 1968, 186-192; F.G. Lounsbury, A Semantic Analysis of the Pawnee Kinship Usage, Language 32, 1956, 158-194; The Structural Analysis of Kinship Semantics, in: H.G. Lunt (ed.), Proceedings of the Ninth International Congress of Linguists, The Hague 1964, 1073-1093; A Formal Account of the Crow- and Omaha-Type Kinship Terminologies, in: W.H. Goodenough (ed.), Cultural Anthropology: Essays in Honor of George Peter Murdock, New York 1964, 351-393.

See P. Swiggers, The Meaning of the Root LHM "Food" in the Semitic Languages, Ugarit-Forschungen 13, 1981, 307-308.

The perspective to adopt then is to place the meaning of the words belonging to the root *lḥm* within their anthropological and ethnographical context: it then becomes clear that the basic meaning is that of the "common (daily) food" used by each social group, either nomads, fishermen, or farmers.

The two examples given, viz. *tp* and *lhm*, could easily be multiplied, and one could think here of *specific types* of investigation such as

(1) the interlocking of space and time in words such as:

qedem ("front, ancient time, bygone days"), qadmāh ("beginning, former state") and qedem ("east"); mō 'ēd ("place of meeting, appointed term, season")

(2) the vocabulary of flora: what is the meaning of terms such as 'elāh, 'allōn,

berōš?

(3) the religious vocabulary: how are we to define the meaning of terms such as those connected with the roots  $ht^3$ , wh, gg,  $pg^2$ ?

(4) the vocabulary of emotions: what is the content of terms such as  ${}^5bl$ ,  ${}^cnh$ ,  $k{}^cs$ , or hps, smh, gyl?

In all these cases we would end up with two basic problems:

- (1) What is the *meaning* of a particular term or set of terms: how do we "restitute" this meaning, how far can we be sure to have grasped (something of) the semantics of the Hebrew language, and in what way can we refine our techniques in order to set up a paradigmatical semantics, not of our *translation* of Biblical Hebrew, but of the Hebrew language itself?
- (2) What can we say about relations of synonymy, antonymy, hyponymy and hyperonymy: of what, e.g., is tp an antonym? What types of paradigmatical relationship do exist between  $ht^3$ , 'wh,  $\delta gg$ ,  $p\delta$ '? How can we "discover" such relationships? And, finally the problem which constantly lurks behind us how do we know that such relationships were indeed part of the linguistic competence of speakers (or users) of Biblical Hebrew?
- 4. I have raised the problem of meaning-constitution, taking it first from the point of view of language structure itself (the collocations of *tp*; the comparative ethnographic embedding of *lhm*). But there is of course another side to it, that of the *account* given by the linguist. Here I see two main approaches in the (paradigmatical) semantics of Hebrew.
- (A) The first one is the approach I would like to label "Centripetal synthesis". A good example of it can be found in E. Jenni's Das hebräische Pi el: Syntaktischsemasiologische Untersuchung einer Verbalform im Alten Testament (1968), a study which can be recommended for both its methodology and its solid documentation 15. Jenni's conclusion is that the Pi el has a "factitive" or "resultative" meaning, and this allows him to reduce its basic semantics to the core-meaning "effecting or causing a state". Basically, this marks an important advance with respect to the traditional

<sup>15</sup> See also E. Jenni, Faktitiv und Kausativ von 'zugrunde gehen', in: Hebräische Wortforschung. Festschrift zum 80. Geburtstag von Walter Baumgartner, Leiden 1967, 143-157; E. Jenni, Zur Funktion der reflexiv-passiven Stammformen im Biblisch-Hebräischen, Proceedings of the Fifth World Congress of Jewish Studies, vol. IV, Jerusalem 1973, 61-70.

descriptions of the Pi<sup>c</sup>el as having a variety of meanings: intensive, causative, declarative, estimative. One could even propose a blanket-term for the Pi<sup>c</sup>el by saying that it is the verb stem-form which has the meaning of "state-effecting" (= bringing into a state). Such an account captures the cases of

- factitive meaning: bringing someone into the state of an actor

- declarative/estimative meaning: bringing someone (verbally) into a state

- intensive meaning: bringing something into the state resulting from an action (or plurality of actions).

Still, a number of problems<sup>16</sup> remain, and because of space restrictions I must content myself with summing them up:

- (1) It seems to me that the account hinges on the presupposition that stem-forms are clearly *delimited* from each other. But several verbs have mixed conjugations, and, e.g., some Pu<sup>c</sup>al forms correspond to Qal forms (e.g., for the verbs *bšl*, *gdl*) and not to Pi<sup>c</sup>el forms; this raises then the following question: To what extent is there functional opposition and/or functional overlap between Qal and Pi<sup>c</sup>el or between Pi<sup>c</sup>el and Hif<sup>c</sup>il:
- We note, e.g., that *dbr* "to say" occurs in the Qal only with infinitive and participle forms, and in the Pi<sup>c</sup>el in all personal forms, as well as in the infinitive and participle; in the light of the fact that some "stems" (e.g., Nif<sup>c</sup>al and Pu<sup>c</sup>al) are very frequent with participles and infinitives, we should perhaps revise the commonly found paradigmatization of conjugations and stem-forms:

- We note that some verbs only occur in the Pi<sup>c</sup>el (e.g. hdš, tnp, rmh) "deceive, betray"): is there any "semantic" reason why this should be so?

- We note that there are cases of overlap between Hif'il and Pi'el forms: e.g., for qds

Pi<sup>c</sup>el "to declare sacred" (cfr. Gn 2,3 and Ex 20,11) Hif<sup>c</sup>il "to declare sacred" (cfr. Jos 20,7 and 1 K 9,3)

Pi<sup>c</sup>el "to treat as holy" (cfr. Ex 20,8 and Dt 5,12) Hif<sup>c</sup>il "to treat as holy" (cfr. Ex 28,38 and Lv 22,2).

(2) The unifying semantic account of the Pi<sup>c</sup>el runs into the problem of the well-attested semantic differentiation within the stem-form itself: even if one succeeds in bringing together, or in linking, the notions of factitivity and resultativity (as

<sup>&</sup>lt;sup>16</sup> In recent years the complexity of the Hebrew verbal system has been examined in detail; see, e.g., A.F. Bean, A Phenomenological Study of the Hithpa<sup>c</sup>el Verbal Stem in the Hebrew Old Testament (diss. Louisville, Faculty of the Southern Baptist Theological Seminary), 1976; J.M. Léonard, Enquête sur l'émergence du hifil en hébreu biblique (diss. Montpellier), 1990; P.A. Siebesma, De functie van de Nif<sup>c</sup>al in het Bijbels Hebreeuws in haar relatie tot de andere passief-reflexieve stamformaties, met name de Pu<sup>c</sup>al en de Hof<sup>c</sup>al (diss. Leiden), 1988. See also the methodological reflections offered by M.H Goshen-Gottstein, The System of the Verbal Stems in the Classical Semitic Languages, Proceedings of the International Conference on Semitic Studies Held in Jerusalem, 19-23 July 1965, Jerusalem 1969, 70-91; J. Hoftijzer, Een kwestie van vraagstelling, Leiden 1991; J. Hoftijzer, A Preliminary Remark on the Study of the Verbal System in Classical Hebrew, in: A.S. Kaye (ed.), Semitic Studies in Honor of Wolf Leslau, on the occasion of his eighty-fifth birthday November 14th, 1991, vol. I, Wiesbaden 1991, 645-651. For an overview of the problems, see L. McFall, The Enigma of the Hebrew Verbal System: Solutions from Ewald to the Present Day, Sheffield 1982.

opposed to an actualis meaning, as noted by Jenni), I fail to see how the account can capture

- the frequentative uses of the Pi<sup>c</sup>el: <sup>3</sup>rb (Pi<sup>c</sup>el "to act as an ambusher"), ktb (Pi<sup>c</sup>el "to fulfill the profession of scribe"), n<sup>3</sup>p (Pi<sup>c</sup>el "to commit adultery with several men")

- the privative use of the Pi<sup>c</sup>el, sometimes formally coinciding with a resultative meaning: e.g., the Pi<sup>c</sup>el of dšn "to clear of fat", lbb "to take away the heart", 'sm "to gnaw the bones" and ht' (a) "to purify from sin" and (b) "to recognize something as missed/to present as a sin-offering".

(3) It is not clear to me why (or whether) denominative verbs (such as the abovementioned dšn, lbb, 'sm) should be treated with the other types of Picel. Personally, I would deal separately with all denominative verbs (occurring in Qal, Nifcal, Pucal and Hifcil stems).

Jenni's study provides a good example of paradigmatical semantics based on structures (or patterns); in the case of tp and lhm we had examples of a semantics based on terms. We can also construe a semantics of units, and take these either discretely (such as, e.g., the initial ayin in some animal names: 'tlp, 'kbr, 'kbyš, 'kšwb, 'qrb; what would be "the semantics" of this initial ayin?) or compactly, as when we would try to study the semantics of units of negation in Biblical Hebrew. In the latter case, our "centripetal synthesis" would be somewhat trivial from the semantic point of view, but interesting from the syntactic point of view:

(1) We have to distinguish types of negation according to their scope<sup>17</sup>:

- a clause (or sentential predicate): l3, 3yn, 3l

- a syntagm: l°

- a word: 1°, °l

(2) In addition, types of negation are to be distinguished according to the morphosyntactic nature of the scope:  $^3yn$  is used with stative forms, blty with infinitive constructs, mn with infinitives,  $^3l$  with jussive forms

(3) There are cases of non-functional opposition: e.g.,  $l^{\circ}hkm$  and  ${\circ}l$  mwt.

From this, it should be clear that a paradigmatical semantics of "negation" in Biblical Hebrew will result in superposed paradigms (e.g., for l), and imbricated (sub)paradigms (e.g., for l), as well as in partly overlapping and partly mutually exclusive paradigms.

(B) This leads us into the second type of approach, which I would like to label "Centrifugal analysis". Here also one can deal with specific units (e.g. the preposition b or the preposition mn – the latter raising the problem of the status of  $m\bar{e}/mi$ ), with structures (e.g., a centrifugal account of the Pi<sup>c</sup>el stem-forms or Nif<sup>c</sup>al stemforms), or with specific terms. I will limit myself to an example involving the term b c (not taken as a proper name). This term occurs in a variety of uses, which I

<sup>&</sup>lt;sup>17</sup> See B. Waltke – M. O'Connor, An Introduction to Biblical Hebrew Syntax, o.c., 660-662; P. Swiggers, Nominal Sentence Negation in Biblical Hebrew: The Grammatical Status of אין, in: K. Jongeling – H.L. Murre-Van den Berg – L. Van Rompay (eds.), Studies in Hebrew and Aramaic Syntax presented to Professor J. Hoftijzer on the occasion of his sixty-fifth birthday, Leiden 1991, 173-179.

think it would be unjustified to translate (in a centripetal approach) as "possessor/holder of -".

It seems to me that given the collocations in which  $b^{c}l$  occurs, we should distinguish at least the following meanings:

(a) "owner" (of a property): cf. Ex 21,28; 2 K1,8; Is 1,3; Pr 1,19; Hi 31,29

(b) "citizen, inhabitant": cf. Jos 24,11; Jd 9,2; 1 Sm 23,11

(c) "husband": cf. Gn 20,3; Dt 22,22

(d) "confederate": cf. Gn 14,13 (b cl bryt); Ne 6,18 (b cl šbw h)

(e) "a man of -" (meaning "a representative instance of" or "a man whose profession it is [to deal with -]"): this is the use we find in

b°l hhlmwt (Gn 37,19) "a dreamer" [a dreamer-man]

b°ly hpršym (2 Sm 1,6) "horsemen"

b°l mšpty (Is 50,8) "my juridical adversary" [the man of my judgment].

Note in this respect the typical usage in the Proverbs, where moral types are discussed:

Pr 22,24 b°l p, a man given to anger"

Pr 23,2 b cl nps "a person given to greed"

Pr 24,8 b °l mzmwt "a person given to intrigues".

bn mwt	³yš khn	b°l hhlmwt
bn hyl	³yš dbrym	b°l hpršym
bn °dm	yš hšm	b°l bryt

We can, I think, exclude with almost no hesitation sequences such as  $b^c l$   $^3dm$  or  $b^c l$   $^2khn$ ,  $b^c l$   $^2khn$ ,  $^2k$   $^2khn$ ,  $^2k$   $^2k$ 

In any event, one cannot deny that in some cases there is overlap between two or three collocations (e.g.,  $bn/\sqrt[3]{y}b/\sqrt[6]{l}$  yryhw), whereas in other instances no mutual substitution is possible; this is one argument in favour of the viability of a centrifugal analysis. The other argument is the observable fact of the multiplicity of collocations for each specific term, which are diverse in nature.

- 5. By way of conclusion, it may be worthwhile to reflect upon the scepticism expressed here about the attempt to construct a paradigmatical semantics of Biblical Hebrew. It seems to me that there are two important facts that justify a cautious attitude:
- (1) All linguistic models are idealizations, which never can cope with the full complexity of the range of data; moreover, linguistic models tend to be selective, and some models are *just not* models in the full sense of the word: a set of techniques and procedures is not yet a model, and some types of conceptual

"models" are not operational and therefore do not deserve the label "model". We may feel more or less troubled by this; but the final criterion should be: will these (so-called) models stand the test of time or not?

(2) In dealing with languages – and especially with languages to which we no longer have direct access – we should never have the illusion that everything can be explained. We never fully dominate the lexicon of any language, let alone the lexical and grammatical structures of its synchronic varieties; as to historical stages, we can achieve much, provide we have at our disposal a rich collection of materials, well contextualized and homogeneously articulated. In the case of Biblical Hebrew we have a documentation which is dispersed in time and space, as well as in content and style: some of these parameters are very difficult to control through the text vocalized by the Massoretes – which, nobody would disagree, remains our starting-point to be taken as seriously (but not uncritically) as possible. Linguistic work on Biblical Hebrew can take (and probably should take) many forms; but we should never forget that in one or another respect we are groping in the dark<sup>18</sup>.

Radicalizing the scepticism vented here, it seems that we should acknowledge that

(1) we have no clear idea of what the semantics of a paradigm is; it is even unclear whether there is a paradigm of lexical units (apart from some shared morphological properties);

(2) we hardly know what the notion of paradigm in semantics stands for. We still face unsolved fundamental questions such as the following: How are such paradigms constituted, how far is such an organization not simply an extralinguistic operation, and how far would it advance our knowledge of linguistic structures?

## Abstract:

"Paradigmatical semantics" is defined here as the study of the semantic content of (a) all types of structures which are recurrent throughout a class of items, (b) the relationships which connect a particular item with a set of environments, or which can be discovered between different sets of forms not contrasting in the same environment.

The position adopted here is that a linguistically relevant semantics is only possible if one takes into account linguistic form as a recurrent structure which occupies, in a significant way, a particular position within the linguistic system. As a consequence, linguistic semantics can yield valuable results only when based on a distributional approach.

Two topics are addressed here from a formally based point of view: (1) How is meaning constituted? (2) What kind of account do we want to give of meaning? The first problem raises the difficult question of the restitution of the "language-internal meaning" as distinct from translational equivalences. As to the latter problem, a distinction is made between two types of approaches, viz. "centripetal synthesis" and "centrifugal analysis". Various examples are discussed to illustrate the possibilities and limitations of a paradigmatical semantics of Biblical Hebrew.

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<sup>&</sup>lt;sup>18</sup> This is not to deny that *systematization* is possible and has indeed already been achieved in many areas of the grammar of Biblical Hebrew.