Time in Ancient Hebrew Lexicon:
The Case of *yrḥ* and *ḥdš*

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Abstract:

This paper presents the linguistic data concerning two lexemes that belong in the lexical field of time, *yrḥ* and *ḥdš*. Coseriu's methodological principles of structural lexematics are applied to the study of the ancient Hebrew lexicon. The analysis consists of five steps: distributional, classematic, syntagmatic, componential and paradigmatic analyses. Through these steps the meanings of these signifiers are described in detail and three lexical units are identified: *ḥdš*[1] 'month', *ḥdš*[2] '(day of) New Moon' and *yrḥ* 'month'. *ḥdš*[1] and *yrḥ* seem to be interchangeable variants. The role of the latter as an archaism could not be proved, given the scarcity of the data and the 'resurgence' of the substantive at a later phase (LBH3).

Keywords: Ancient Hebrew Linguistics, Biblical Studies, Lexical Semantics, Time

1. *Introduction*[*]

Time – as well as having the unfortunate and fastidious habit of flowing inexorably on – engages, more than anything, human beings' curiosity and their faculty of imagining. To comprehend its inner nature and unlock its secrets gives the illusion of being capable of unraveling the ultimate mystery in which human mortality is shrouded. To meet an end vexes and frightens us – to die, in a word, is an infinite one tries to elude.[1] It is exactly the words for time on which I would like to focus. The Hebrew lexicon for time has been studied before. These analyses aim to identify the peculiar

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[*] I would like to thank Julia Bolton Holloway for having read a preliminary draft of this paper and revised my English prose.

[1] Many modern languages make extensive use of euphemisms in this regard: to pass away, to pass on, to perish, depart this life etc.; it. *perire, andarsene, spirare, passare a miglior vita, decedere, scomparire* etc.

concept of time that was common in ancient Israel.[2] Due to the unique circumstances of the textual tradition of Hebrew, lexical stock is one of the few sources on the topic of time - or at least it was so deemed by the many scholars who have researched it. In these cases, linguistic data was used to substantiate analyses which were not strictly linguistic. As a matter of fact, in keeping with many other ancient cultures, even Hebrew culture was not compelled to make explicit and systematic observations on the idea of time. Hence, one do not have texts which deal specifically with this issue, shedding light on Hebrew's distinctive perspective on it.

As we were saying, in this paper I would like to focus attention on the ancient Hebrew lexicon concerning time from a structural-semantic point of view. My analysis will be consistent with Eugenio Coseriu's work and his structural lexematics, applied to Ancient Hebrew by Ida Zatelli and Angelo Vivian.[3]

My aim is not to discuss the concept of time from a philosophical perspective. What I am interested in is the study of the linguistic tools used by native speakers in order to denote a semantic area, which is so important in our life. To analyse the structural relations in a semantic field may give us a precise idea of how speakers used to segment lexical units in the semantic continuum pertaining to time.[4] Moreover, this examination allows us to define the specific areas of signification for each lexeme which belongs to the said field and to discern the paradigmatic relations that determine the choice between one or another unit in different syntagms and expressive contexts. This methodology is aimed to contrast an inveterate tendency proper to Hebrew lexicography to analyse each lexeme in a sort of linguistic isolation as if they could not be found in the same sources or they were not placed in a reciprocal relation.

This kind of atomism in a lexical-semantic analysis is found under the entries to lexemes of time in the main lexicons dedicated to biblical Hebrew. For instance, one may consider the nouns *'wlm*, *nṣḥ* and *'d*: the translation

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[2] For a brief history of research on this topic, see Perani (1976) and Barr (2009 [1969]). Barr (1961) contains a major critique of the so-called biblical theology, which deemed Greek thought as fundamentally different from Hebrew thought. In Barr's opinion such a radical polarization based upon alleged linguistic criteria was unfounded and erroneous. He claims that the linguistic data were often inadvertently presented so as to fit preconceived notions about the subject matter. Barr (2009 [1969]) picks up again that critique, focusing on the subject of time. See also Stefani (1999) and Prato (2013), from the latter particularly chs. 3-4. Brin (2001) shifts back the focus on textual sources. As far as I can tell, it is the most comprehensive and recent work on the topic. However, from a methodological standpoint it is not so much a linguistic study as a textual analysis based on philological criteria.

[3] See Coseriu (1971a, 1971b, 1971c); Vivian (1978); Zatelli (1994, 1995, 2004).

[4] See Coseriu (1971c: 304-305).

given in many cases shows a variance which cannot be supported by a rigorous analysis of data. 'Perpetuity' (*nṣḥ* and *ʿd*), '(long) duration' and 'long time' (*ʿwlm*), 'everlastingness', 'duration and permanency' (*nṣḥ*), 'lasting future time' and 'eternity' (*ʿd*) are some of the translations suggested.[5] As we can see, lexicons differ sometimes significantly over the meaning of the same lexeme. Moreover, different translations are given for the three nouns, which were quoted before, even though from a close study it emerges that the respective areas of signification are most likely the same.[6]

The inconsistencies inferred by the picture that has been drawn before in the definitions of the meaning of the units, may be rectified through an analysis of the paradigmatic structure of the semantic field to which the lexemes belong. The paradigmatic oppositions along the distinctive traits of meaning or semes that exist between lexical units, allow us to delimit gradually and with greater precision the specific area of signification which is proper to each lexeme.

This kind of analysis I would like to propose in this brief article. Naturally, for the purpose of this paper, it will not be possible to examine the whole lexical field of time. Instead, nouns will be studied. In particular, this paper will be focussed on *yrḥ* and *ḥdš*.

The analysis will be structured as follows:

- distributional analysis: distribution of each lexeme within each functional language[7] of biblical Hebrew will be examined;[8]
- syntagmatics and classematic analysis: syntagmatic data pertaining to the lexemes examined will be presented in order to identify the specific classes whom they belong in;[9]
- analysis of selected occurrences of the lexical units;
- componential analysis: the meaning of each lexeme will be described for all of the functional languages and the distinctive semantic traits will be identified;

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[5] See BDB, HALOT and DCH, *ad voces*. See also Lisowski (1966) and Mandelkern (1955), *ad voces*.

[6] Barr tacitly backs this argument quoting von Orelli, who, after having identified three different meanings for the three substantives basing such a distinction upon etymological criteria, "has himself to admit that in usage little essential difference of sense seems to have been known. In fact the linguistic consciousness of the writers was 'dull' towards the etymological nuances, and no wonder, since much of the prehistory of the words must have been unknown to them". See Barr (2009: 90-91 [1969]).

[7] A functional language is a homogeneous "linguistic system", that is synchronic, syntopic, synstratic and synphasic. See Zatelli (1995: 55-63, 2004: 134).

[8] Post-biblical Hebrew, i.e. that of Ben Sira', qumranic Hebrew and mishnaic Hebrew, will be left out. A study of the lexical field of substantives of time for these linguistic phases is currently in progress as the present author's PhD thesis at the University of Florence.

[9] See Fronzaroli (1993: 80); Zatelli (2004: 135).

- paradigmatic analysis: the reciprocal paradigmatic oppositions of the lexical units will be studied in order to gain a better understanding of the structure of the lexical field.

A list of functional languages pertaining to biblical Hebrew is shown in the following table:[10]

Table 1. Functional Languages in Biblical Hebrew

ABH	Archaic Poetical Hebrew	Gen 49:3-27; Ex 15:1-19; Nm 22:2-24:25; Dt 32.33; Jdg 5; 1S 2:1-10; Ps 68.
EBH1	Early Historical-Narrative Hebrew	Torah (except ABH and EBH4); Former Prophets; Ruth; Inscriptions (1st half of the Ist millennium BCE).
EBH2	Early Poetical Hebrew	2K 19:21-35; 2S 22-23:7; Classical Prophets; Lm; Prv; Psalms (except late ones) → Jer, Ezek and Lam are chronologically exilic, whereas Hag, Zc, Mal, Joe, Is 40-66 and probably Prv 1-9; 30-31 are chronologically late; however, the language of these texts is considered typologically Early Biblical Hebrew)
EBH3	Poetical Hebrew of Hosea	Hosea
EBH4	Juridical-Cultic Hebrew	Ex 20:1-17; 20:22-23:33; 25-31; 34:10-26; Lv; Dt 5:6-21; 12-26; 27:14-26; juridical-cultic sections of Ezek
LBH1	Late Historical-Narrative Hebrew	Jonah; Job 1-2; 42:7-17; Qoh; Est; Dn; Ezr; Neh; Chr; Inscriptions (2nd half of the I millennium BCE)
LBH2	Late Poetical Hebrew	Ct; Ps 103; 117; 119; 124; 125; 133; 144; 145; doxologies 41:14; 72:19-20; 106:47-48. Disputed: 104; 106; 107; 109; 111; 112; 113; 116; 126; 135; 137; 143; 146; 147; 148
LBH3	Poetical Hebrew of Job	Poetical Job

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[10] See Zatelli (2004: 140-142).

2. *Distributional Analysis*

Table 2. Distribution of the lexemes

	ḥdš	*yrḥ*
ABH	0	1
EBH1	119	14
EBH2	53	1
EBH3	2	0
EBH4	30	1
LBH1	85	0
LBH2	0	0
LBH3	2	4
BH	204	17
LBH	87	4
Total	291	21

2.1 *Notes*

A remarkable gap in the distribution of the two lexemes can be observed. *ḥdš* occurs 291 times in biblical Hebrew, whilst *yrḥ* is to be found only 21 times - a circa 14:1 ratio.[11] Therefore, the latter is quite rare especially when compared to the former. Both the lexemes show a marked decrease in frequency in the transition from EBH to LBH. Only 30% of the occurrences of *ḥdš* is to be found in LBH. For *yrḥ* that figure decreases by another 5%. For a correct interpretation of these data it is necessary to take account of the unique circumstances of textual transmission when it comes to the sources at our disposal. It is no coincidence that if we look beyond these two substantives to encompass the lexical field in its entirety we will notice that a similar

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[11] See Lisowski (1966) and Mandelkern (1955), *ad voces*.

decrease in frequency is common to most of its lexical units. This is partly, if not exclusively, due to the fact that EBH corpora are sensibly larger than LBH ones, as can be easily inferred by the functional language table. However, sometimes a decrease in the use of a lexeme can be caused by a restructuring of the specific areas covered by each lexemes within the lexical field. One of the aims of this study is to shed some light on this matter.

It is worth noting that both lexemes show their highest frequency of occurrence in the historical-narrative corpora. In fact, the biblical narrative pericopes are built upon a complex chronological structure made up largely of dates, both absolute and relative. Therefore, it comes as no surprise that substantives as *šnh* 'year', *ḥdš* 'month' and *ywm* 'day' constitute the basic elements of such structure. This fact explains the high frequency of *ḥdš* in the functional languages EBH1 (119x) and LBH1 (85x). We deliberately did not mention *yrḥ*. This lexeme appears to be marginal, despite the fact that its main area of application is in the same dating system as that in which *ḥdš* appears. EBH1 shows 14 occurrences. From LBH1 it is conspicuously absent. However, the picture is made considerably fuzzier by the fact that of those 14 occurrences of *yrḥ* in EBH1 8 come from epigraphic sources.[12] Moreover, all of those instances of the lexeme occur in the very same text, the Gezer Calendar - Gez(10). It is indeed one of, if not the most ancient Hebrew text to have survived. However, it is also deemed by some scholars to be a sort of school exercise carried out by a pupil.[13] Which renders the extensive use of the lexeme difficult to interpret. All of this adds up to only 5 instances of *yrḥ* within the biblical text. The contrast with the situation of *ḥdš* could not be any starker: 8 occurrences from inscriptions versus 111 from the Bible. This is much more interesting if we consider the scarcity of epigraphic sources still extant.

The early poetical language (EBH2) shows *ḥdš* much less frequently (53x). As for *yrḥ* we do not have a sufficiently wide study sample (1x). It is nonetheless worth noting the fact that all the instances of the former, except one (Ps 81:4), occur in the prophetical books. This means that the lexeme is virtually absent from both the Psalms and wisdom literature.

Neither substantive occurs in late poetical language (LBH2).

The juridical-cultic corpus (EBH4) includes 30 instances of *ḥdš*, whilst *yrḥ* is virtually absent from it (1x).

In the poetical language of Job (LBH3) the former lexeme turns out to be marginal (2x). Unexpectedly the latter is represented to a greater extent (4x).

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[12] The reading *yrḥ ṣḥ* for Arad(6): 20,2, inscription on a jar, is Aharoni's. We would have here another name of month from the ancient Canaanite calendar. However, following Lemaire (1973) one should read *gr' bn 'zyhw*, in any case a reading far from being certain. Given the fragmentary state of the text, this occurrence will be excluded from the subsequent analysis. See Davies (1991: 18); Renz and Röllig (1995-2003, vol. 1: 385-386).

[13] See Renz and Röllig (1995-2003: 30-37).

Given the diatopically distinct nature of LBH3[14], we could be looking at a differently structured lexical field. However, we cannot rule out the possibility that the author made a peculiar stylistic choice, reviving a substantive no more in use.

3. *Classematic Analysis*

Since the passage is obscure precisely in regard to *ḥdš*, Ho 5:7 will be excluded from the analysis. The numerous suggested interpretations are not based on sufficiently cogent arguments.[15]

Three classes have been identified: *time units*, *feasts* and *states*. The first, not surprisingly, is the most frequent for a lot of time substantives. Every lexeme that designates a definite segment of time susceptible of becoming a standard unit of measurement belongs in this class. Therefore, there are two possibilities: either these units represent the time intervals within which an event or an entity are placed on a specific point in time or that the duration of a given phenomenon is measured by means of a series of said units. Both *ḥdš* and *yrḥ* designate the lunar month[16] - the ancient Hebrew calendar was in fact lunar.[17] The referent is both the calendar month, with conventionally set chronological limits, i.e. with a beginning and an end on fixed days; and the corresponding standard measure of duration. Varying portions of a year can be measured through a series of monthly standard units. The same applies to every other time unit: months can be measured in days (*ywm*), generations, entire lives or reigns in years (*šnh*) and even greater time spans in generations (*d(w)r*). As far as *ḥdš* and *yrḥ* are concerned it is worth stressing the fact that both lexemes designate the same time interval, the lunar month.

The second identified class - *feasts* - accounts for a clearly discernible change in lexical combinations for *ḥdš*. This phenomenon sets apart this lexeme from *yrḥ*. What emerges is a peculiar affinity of the former with *šbt* 'Sabbath', *ḥg* 'feast (associated with pilgrimage)', *mw'd* 'festival, time of festivity'. In this case, the referent is the New Moon, the day or, generally speaking, the time

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[14] See Sciumbata (1997: 13-14).

[15] The thesis suggested in Andersen and Freedman (1980: 396-398), according to which we should interpret *ḥdš* as an adverbial accusative of time, meaning 'at New Moon' leaves a lot to be desired, since this syntagm in biblical Hebrew always has a durative meaning: e. g. *ḥdš* '(for) a month', *šl(w)šh šnym* '(for) three years'. Interesting is the suggested reading *ḥdš* '(some-one) else', from the adjective *ḥdš*, here substantivised. Unfortunately, it is impossible to verify it, due to the lack of parallels for this passage. See also Mays (1969: 82, 84-85).

[16] See *ḥdš* in GLAT (vol. II: 809-813) and *yrḥ* in GLAT (vol. III: 1103-1105).

[17] See entry *šnh*, GLAT (vol. IX: 700-703). However, Clements' certainty in claiming that Ex 23:15 and 34:18 prove that "each month was reckoned from the appearance of the new moon (*Es 23,15; 34,18*)" baffles me. In those quoted passages is simply stated that the Feast of Unleavened Bread will start at the set time of *'Abib*. No mention whatsoever is made either of new moon or of the beginning of the month. See GLAT (vol. III: 1104).

when a conjunction between Earth's satellite, the Sun and our planet occurs. However, the New Moon is not merely an astronomical phenomenon through which individuals experience the passing of time. Rather, it has an additional distinctive trait, its ritual and festal nature.

Identifying the third class has been quite a challenge. The fact that only one passage seems to reveal this semantic use case renders the thesis suggested below dubious at best. In the passage in question - Jer 2:24 - the noun refers to the estrus cycle of a wild she-ass. The matter becomes even more complicated if one takes into consideration the symbolic significance of the animal and its condition since it is said that nobody can "bring her back" during the breeding season and that its owners will not have to go far looking for her because it is going to be found with a mate. The passage is going to be analysed further on but, for now, it will suffice to underline the necessity of exercising caution when drawing inferences from an isolated source.[18]

3.1 *Archaic Poetical Hebrew (ABH)*

Only *yrḥ* occurs in the archaic poetical corpus. However, even this lexeme is quite secondary since it is found in a single and obscure passage. The class *time units* has been chosen for reasons which will be explained in the analysis of the passage.

Table 3. Classematic Analysis: ABH

Archaic Poetical Hebrew (ABH)			
	Time units	**Feasts**	**States**
ḥdš	0	0	0
yrḥ	1	0	0

3.2 *Early Historical-Narrative Hebrew (EBH1)*

In the historical-narrative corpus *ḥdš* belongs in the classes *time units* and *feasts*. *yrḥ* belongs in the class *time units*.

Table 4. Classematic Analysis: EBH1

Early Historical-Narrative Hebrew (EBH1)			
	Time units	**Feasts**	**States**
ḥdš	104	7	0
yrḥ	13	0	0

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[18] On the caution required when selecting the various classemes, see Zatelli (1978: 30-31).

3.3 Early Poetical Hebrew (EBH2)

In early poetical Hebrew *ḥdš* belongs in three classes: *time units*, *feasts* and *states*. For *yrḥ* it has been identified the classeme *time units*.

Table 5. Classematic Analysis: EBH2

Early Poetical Hebrew (EBH2)			
	Time units	**Feasts**	**States**
ḥdš	45	7	1
yrḥ	1	0	0

3.4 Poetical Hebrew of Hosea (EBH3)

Hosea makes use exclusively of *ḥdš* and only in one occasion. The lexeme belongs in the class *feasts*.

Table 6. Classematic Analysis: EBH3

Poetical Hebrew of Hosea (EBH3)			
	Time units	**Feasts**	**States**
ḥdš	0	1	0
yrḥ	0	0	0

3.5 Juridical-Cultic Hebrew (EBH4)

In the juridical-cultic corpus both lexemes occur. *ḥdš* belongs in the classes *time units* and *feasts*, whilst *yrḥ* in the class *time units*.

Table 7. Classematic Analysis: EBH4

Juridical-Cultic Hebrew (EBH4)			
	Time units	**Feasts**	**States**
ḥdš	25	5	0
yrḥ	1	0	0

3.6 Late Historical-Narrative Hebrew (LBH1)

In late historical-narrative Hebrew only *ḥdš* is to be found in the classes *time units* and *feasts*.

Table 8. Classematic Analysis: LBH1

Late Historical-Narrative Hebrew (LBH1)			
	Time units	**Feasts**	**States**
ḥdš	79	6	0
yrḥ	0	0	0

3.7 *Poetical Hebrew of Job (LBH3)*

Both *ḥdš* and *yrḥ* in the poetical language of Job belong in the class *time units*.

Table 9. Classematic Analysis: LBH3

Poetical Hebrew of Job (LBH3)			
	Time units	**Feasts**	**States**
ḥdš	2	0	0
yrḥ	4	0	0

4. *Syntagmatics*

ḥdš: the noun is masculine, although in Gen 38:24 one can read *kmšlš ḥdšym*. The feminine numeral could lead us to conclude that the substantive could both be masculine and feminine. However the uniqueness of the occurrence could be interpreted as the product of a scribal error.[19] According to the Masoretes the lexeme follows the pattern CVCVC proper to the so-called segholates.[20] It presumably follows the *qutl* pattern,[21] although one cannot make a final conclusion, given the lack of direct parallels in other semitic languages.[22]

The lexeme occurs in the singular *ḥdš* and in the plural *ḥdšym*.

[19] BHS, *ad locum* in the critical apparatus quotes the variant reading of the Samaritan Pentateuch *kmšlšt ḥdšym*.

[20] These are nouns that presented the primitive sequence CVCC, which was not tolerated in the biblical text by the Tiberian tradition of vocalization. See Joüon and Muraoka (2011: 221-226).

[21] Along with *qatl* and *qitl* it is one of the conventional names, widely adopted in the field of Hebrew linguistics, that indicates the original phonological pattern of the segholates. *qtl* is taken as a model of consonantal root. The three patterns can be represented as follows: CaCC, CiCC, CuCC.

[22] HALOT, *ad vocem* quotes Ugaritic *ḥdt*. However, Ugaritic texts, as is usual for semitic languages, show only the consonantal graphemes.

yrḥ: the noun is masculine, again a segholate. In this case we are fortunate enough to have a few parallels from other Semitic languages that reveal the *qatl* pattern for our lexeme.

(1)   a.   *yahrā* (Mandaic)

       b.   *warḫ* (Ethiopic)

       c.   *(w)arḫu* (Akkadian)

(HALOT: *ad vocem*)

The lexeme occurs in the singular *yrḥ* and in the plural *yrḥym*, as well as a dual form with pronominal suffix 3rd ps. m. s. *yrḥw* which is exclusive to epigraphic sources.[23]

4.1 *Archaic Poetical Hebrew (ABH)*

This corpus shows a single occurrence of *yrḥ*, whilst none of *ḥdš*.

The substantive is governed in construct state by *grš* 'bounteous crop' and is parallel with *šmš* 'sun'.

4.2 *Early Historical-Narrative Hebrew (EBH1)*

ḥdš: the singular form can be found in construct state syntagms as *nomen regens*, i.e. the governing noun, with *ywm* 'time', *'byb* 'Abib' and *zw* 'Ziw' (3x, 1x, 1x respectively). As can be easily seen, just a handful of combinations seem to be possible. The syntagm *ḥdš ymym* (*ḥdš* + *ywm*) is analogous with what we found in some modern languages, namely syntagms like 'a month's time' and in Italian, 'un mese di tempo'. As for the rest of the occurrences the lexeme shows a not so surprising predilection for names of months. The plural form functions as *nomen regens* of *šnh* 'year' (2x). The substantive occurs in the singular as *nomen rectum* of *bn* '(*x* months) old' (9x), *'lh* 'burnt offering' (1x), *ywm* 'day' (2x) and *mḥrt* 'the next day' (1x). In the plural, of *r'š* 'beginning, first of' (3x) and cardinal numerals (3x).

The lexeme can be found in prepositional phrases preceded by *b* 'in' (27x) and *l* 'related to/of' (39x). There are only two instances of the noun preceded by *'d* 'until'.

ḥdš takes the following clitic pronouns: 2nd ps. m. pl. *-km* (2x) and 3rd ps. m. s. *-w* (2x).

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[23] It is a variant of the Masoretic *yrḥyw*, written in *scriptio defectiva*. The most plausible interpretations of this form read it as either *yarḥaw* or *yarḥew*, both dual in number followed by a pronominal suffix 3rd ps. m. s., according to the respective origin of the form: the south for the former, the north for the latter. See Renz and Röllig (1995-2003, vol. 1: 32-34).

It is followed by the demonstrative adjective *zh* 'this, that' (6x) and by ordinal numerals (33x).

The noun is added in apposition with cardinal numerals that agree with it in gender and number (15x).

Moreover, in the singular it takes the role of accusative of limitation preceded by a cardinal numeral (2x).

As an accusative of temporal determination usually preceded by a numeral the lexeme expresses duration (11x).

ḥdš is seldom the subject noun of a sentence (5x). It almost exclusively occurs in nominal clauses. In one case the verb *hyh* 0/1 'to be, to happen, to come to pass' takes *ḥdš* as subject.

yrḥ: the singular form can be found in construct state as *nomen regens* of the names of months *zw* 'Ziw' (1x), *bwl* 'Bul' (1x), *'tnym* 'Etanim'[24] (1x) and of *ywm* 'time' (1x).

The lexeme occurs in prepositional phrases with *b* 'in' (3x).

There is only one instance of the accusative of temporal determination and one of apposition with a cardinal numeral.

All instances of *yrḥ* as subject noun in nominal clauses in this functional language (8x) are attested in the already mentioned Gezer Calendar (end of 10th century BCE).

From the data examined above, we can conclude that the two lexemes are basically interchangeable on a syntagmatic and classematic level. In the course of componential and paradigmatic analyses we will try to determine whether we are dealing with *allotria* or with contextual variants.[25]

4.3 *Early Poetical Hebrew (EBH2)*

ḥdš: there is a single instance of the lexeme in construct state, followed by the name of month *šbṭ* 'Šebaṭ', derived from the Babylonian calendar.

The substantive is often preceded by the prepositions *l* 'related to, of' (24x), *b* 'in' (18x) and *mdy* 'from'[26] (1x).

Rare are the occurrences of clitic pronouns affixed to the lexeme: 3rd ps. f. s. *-h* (1x), 3rd ps. m. s. *-w* (1x) and 2nd ps. m. pl. *-km* (1x).

The substantive is followed by ordinal numerals (17x) and preceded by cardinal numerals (6x).

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[24] BDB and HALOT, *ad locum* interpret the name of the seventh month in the Canaanite calendar according to the most frequent meaning assigned to the adjective: *ever-flowing*. Therefore, *yrḥ h'tnym* would mean 'month of steady flowings', the only ones still to have water in September/October.

[25] See Zatelli (2004: 135).

[26] As in the phrase 'from month to month, every month'.

The verbs *ykl* 0/1 '(to be able) to endure' (1x) and *śn'* 0/1 'to hate' take *ḥdš* as object, whilst the verb *'br* 0/1 'to pass' (1x) takes it as subject.

yrḥ: as for the single instance of *yrḥ* it is preceded by the preposition *b* 'in' and followed by a cardinal numeral.

4.4 *Poetical Hebrew of Hosea (EBH3)*

ḥdš: the noun with the clitic 3rd ps. f. s. pronoun occurs as the object of the verb *šbt* H/1 'put an end to'.

4.5 *Juridical-Cultic Hebrew (EBH4)*

ḥdš: in construct state it is either followed by *'bib* 'Abib' (5x) or preceded by *mw'd* 'set time' (2x), *ywm* 'day' (2x) and *bn* '(x months) old' (1x).

The prepositions *l* 'related to, of' (14x) and *b* 'in' (10x) precede the lexeme.

It occurs along with ordinal numerals (7x) and demonstrative adjective *zh* (1x).

It is the object of the verb *šmr* 0/1 'observe, celebrate, keep' (1x).

yrḥ: the substantive is attested in the accusative of temporal determination expressing duration, followed in construct state by *ywm* 'time'.

4.6 *Late Historical-Narrative Hebrew (LBH1)*

ḥdš: in construct state the singular form occurs as the *nomen regens* of names of months *'dr* 'Adar' (8x), *nysn* 'Nisan' (2x), *ṭbt* 'Tebet' (1x), *sywn* 'Siwan' (1x), *kslw* 'Kislew' (1x), whilst in the plural it is followed by *šnh* 'year' (1x). As *nomen rectum* in the singular it follows *mḥlqt* 'division' (1x), whilst in the plural it is preceded by *kl* 'all, total' (1x).

As observed in other functional languages the lexeme occurs with the prepositions *l* 'related to, of' (38x), *b* 'in' (19x) and *mn* 'from' (1x).

It is often followed by ordinal numerals (44x), seldom by the demonstrative *zh* 'this, that' (6x).

There are instances of apposition with a cardinal numeral (7x).

The substantive occurs as an accusative of temporal determination (6x) and as an accusative of limitation preceded by a cardinal number (2x).

The verb *ng'* 0/1 'to arrive, to come' takes *ḥdš* as subject (2x).

4.7 *Poetical Hebrew of Job (LBH3)*

ḥdš: the noun can be found in construct state syntagms as *nomen rectum* with *mspr* 'number' (2x).

It has the 3rd ps. m. s. clitic pronoun affixed (2x).

It occurs as the subject of the verb *ḥṣṣ* 0/2 pass. 'to be cut (in two) > to be curtailed, to be at an end'. In fact, the subject noun would be *mspr*, but the verb agrees in number with *ḥdš*.

yrḥ: the plural can be found in construct state as *nomen regens* followed by *šw* 'futility' (1x) and *qdm* 'antiquity, ancient times' (1x). As *nomen rectum* with *mspr* 'number' (1x).

A single instance of the substantive with a preposition can be found, with *k* 'like' (1x).

It is the object of verbs *nḥl* H/1 pass. 'to become the possessor of' (1x) and *spr* 0/1 'to count'.

5. *Sources*

5.1 *Archaic Poetical Hebrew (ABH)*

(2)   Dt 33:14

wmmgd tbw't šmš wmmgd grš yrḥym:

'With the bounteous yield of the sun, and the bounteous crop of the months.'[27]

A slightly altered translation than TNK's was adopted in this case. *Months* was preferred to *moons*. The reason behind this choice is that there is not a single case in the whole Bible in which *yrḥym* stands for 'moons'. Even if one chooses to leave aside as a later linguistic innovation the Masoretic tradition that clearly distinguishes between *yrḥ* 'month' and *yrḥ* 'moon' by means of a different vocalization, we cannot avoid the simple fact that the former has both a singular and a plural form, whilst the latter never appears to have a plural form. Therefore, translating it with 'moons' ignores any evidence to the contrary. The problem arises from the fact that *yrḥym* is clearly in parallel with *šmš* 'sun', which would render a translation 'moons' all the more suitable. However, even if we accepted that translation, how could we account for the use of the plural form? Why 'moons'? After all it is *the* moon and its movement that governs the agrarian cycles, not several moons. Only metre and prosody could explain the presence of a plural in lieu of a singular. Unfortunately, a decision in this regard could not be made, given the uniqueness of this scenario. The reference to the moon and its cycles, so fundamental to the agrarian economy characteristic of ancient civilisations, is already implicit in the lexeme *yrḥ* 'month'. So a parallel with *šmš* 'sun' is not out of place.[28]

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[27] All translations are TNK's unless otherwise stated.

[28] GLAT (vol. 3: 1104) translates "yield of the months". A similar translation can be found in von Rad (1966: 203), "the rich yield of the months". See also Christensen (2002: 841.843 fn 14.c.851). He (*Ibidem*, 843 fn 14.c) quotes Craigie (1976: 397 fn 24), in holding that *yrḥym* "means both 'months' and 'moons'". In fact, Craigie writes: "There may be a deliberate play on words, for this word may also be translated 'moons' (cf. 'sun' in the preceding line)". However,

As shown in § 3.1 we placed the lexeme within the class *time units*. Since as we have seen the passage is obscure and the syntagm *grš yrḥym* is a *hapax legomenon* in biblical Hebrew, this was done in a dubitative fashion. For all these reasons the lexeme in EBA will not be subject to further treatment during componential and paradigmatic analyses.

5.2 *Early Historical-Narrative Hebrew (EBH1)*

(3)   a.   1K 6:1
wyhy bšmwnym šnh w'rb' m'wt šnh lṣ't bny-yśr'l m'rṣ-mṣrym bšnh hr- by'yt bḥdš zw hw' hḥdš hšny lmlk šlmh 'l-yśr'l wybn hbyt lyhwh:
'In the four hundred and eightieth year after the Israelites left the land of Egypt, in the month of Ziw - that is, the second month - in the fourth year of his reign over Israel, Solomon began to build the temple of *YHWH*.'

      b.   1K 6:37-38
[37] *bšnh hrby'yt ysd byt yhwh byrḥ zw:*[38] *wbšnh h'ḥt 'śrh byrḥ bwl hw' hḥdš hšmyny klh hbyt lkl-dbryw wlkl-mšpṭw wybnhw šb' šnym:*
[37] 'In the fourth year, in the month of Ziw, the foundations of the House were laid;' [38] 'and in the eleventh year, in the month of Bul - that is, the eighth month - the House was completed according to all its details and all its specifications. It took him seven years to build it.'

The examples provided above attest the main use of the two lexemes in the biblical narratives. They provide the building blocks for the chronological structure that holds together those narratives. It is no coincidence that a substantial number of their occurrences can be found in dates. The frequent combination with numerals, with the preposition *b* 'in' and with names of months shows their belonging in the class *time units*. Both lexemes establish a paradigmatic opposition to another member of the lexical field, *šnh* 'year'.

Examples (3)a and (3)b show that the two substantives can be used interchangeably. Both occur in the very same syntagmatic context (*b* + *šnh* X *b* + *ḥdš/yrḥ* Y). It is worth noting that both are followed by the name of month derived from the Canaanite calendar, *zw*. In (3) b *yrḥ* is followed by another name of month: *bwl*. However, in this case we can observe a rather interesting phenomenon, that is, the insertion of a gloss to the phrase *yrḥ bwl*.[29] The text reads *byrḥ bwl hw' hḥdš hšmyny* 'in the month of Bul - that is the eighth month'. One possible explanation for this fact is that *yrḥ* had begun to be perceived as an archaism, a variant belonging in a different

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as we have seen, his assertion cannot be verified with the extant sources. On the contrary, they seem to point in the opposite direction.

[29] BHS sees it as an interpolation. See BHS, *ad locum* in the critical apparatus.

synchronic level. The distribution of the two lexemes clearly shows that *ḥdš* is the obvious choice when designating the lunar month. In fact, *yrḥ* is virtually absent from every other EBH corpus and entirely so from LBH except for LBH3. In this regard, the Gezer Calendar would seem to support the notion that in ancient times *yrḥ* could be more frequent. However, since the language of Gez(10) is typologically early biblical Hebrew, its decrease in frequency must have taken place for the most part in a time prior to that of the earliest extant documents.

(4)   a.   1S 6:1
           wyhy 'rwn-yhwh bśdh plštym šb'h ḥdšym:
           'The Ark of *YHWH* remained in the territory of the Philistines seven months.'

       b.   Ex 2:2
           wthr h'šh wtld bn wtr' 'tw ky-ṭwb hw' wtṣpnhw šlšh yrḥym:
           'The woman conceived and bore a son; and when she saw how beautiful he was, she hid him for three months.'

       c.   2K 15:13
           šlwm bn-ybyš mlk bšnt šlšym wtš' šnh l'zyh mlk yhwdh wymlk yrḥ-ymym bšmrwn:
           'Shallum son of Jabesh became king in the thirty-ninth year of King Uzziah of Judah, and he reigned in Samaria one month.'

(4)a shows *ḥdš* in an expression of time duration measured in standard units: the Ark had fallen into the hands of the Philistines and it remained with them for seven months.

(4)b and (4)c show *yrḥ* in a similar context and in the same function. Unfortunately, we cannot draw clear conclusions from (4) b, since the syntagm *ṣpn* "to hide" 0/1 + *yrḥ* is a *hapax legomenon*, *ergo* the reasons behind this lexical choice remain obscure. On the contrary, in (4) c the lexeme occurs in the same syntagmatic context found in 2K 23:31 (et al), providing clear evidence of its interchangeability with *ḥdš*.

(5)   1S 20:5
           wy'mr dwd 'l-yhwntn hnh-ḥdš mḥr w'nky yšb-'šb 'm-hmlk l'kwl wšlḥtny wnstrty bśdh 'd h'rb hšlšyt:
           'David said to Jonathan: - Tomorrow is the new moon, and I am to sit with the king at the meal. Instead, let me go and I will hide in the countryside until the third evening.'

(5) shows the distinctive traits by which the two lexemes differ from one another. In this case, *ḥdš* belongs in the class *feasts*. It is written that David

should usually dine at court during the Feast of New Moon. What reveals a change in class is once again the lexical combinations. The lexeme appears alongside *mḥr* 'tomorrow' in a nominal clause. Therefore it follows that *ḥdš* cannot possibly refer to the time unit 'month'. Instead, it designates the day of New Moon, which has a festive character by virtue of its importance for determining the rhythm of agriculture. If one compares the data to those available in the other Semitic languages documented in the area, one will realise that the signifier assigned to the signified 'month' is derived from the root *WRḤ. Therefore, given the innovative character of the lexeme in the Hebrew language it is at least possible that in a pre-documentary phase of the language *ḥdš* denoted primarily the New Moon. Then, its area of signification would extend to encompass the meaning 'month', gradually eroding away the area of signification covered by *yrḥ*. Etymological considerations seem to support this theory.[30] It is, therefore, necessary to identify two distinct lexematic units, that account for the observed polysemy.

5.3 *Early Poetical Hebrew (EBH2)*

(6)   a.   Jer 1:3
           wyhy bymy yhwyqym bn-yʾšyhw mlk yhwdh ʿd-tm ʿšty ʿšrh šnh lṣdqyhw bn-yʾšyhw mlk yhwdh ʿd-glwt yrwšlm bḥdš ḥḥmyšy:
           'And throughout the days of King Jehoiakim son of Josiah of Judah, and until the end of the eleventh year of King Zedekiah son of Josiah of Judah, when Jerusalem went into exile in the fifth month.'

      b.   Ezek 39:12
           wqbrwm byt yśrʾl lmʿn ṭhr ʾt hʾrṣ šbʿh ḥdšym:
           'The House of Israel shall spend seven months burying them, in order to cleanse the land.'

      c.   Zc 11:8
           wʾkḥd ʾt-šlšt hrʿym byrḥ ʾḥd wtqṣr npšy bhm wgm-npšm bḥlh by:
           'But I lost the three shepherds in one month; then my patience with them was at an end, and they in turn were disgusted with me.'

As we have seen in the corpus EBH1, the standard poetic language uses *ḥdš* as time unit in dates in order to indicate a calendar month with conventionally set beginning and end or in syntagms of time duration. In (6)a one reads *b* 'in' + *ḥdš* + ordinal numeral. It is important to underline the lack of the names of months which instead are present in the corpus EBH1. In (6)

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[30] Consider the adjective *ḥdš* 'new' and the verb *ḥdš* 'to renew', attested exclusively in the form 0/2.

b we find the syntagm cardinal numeral + *ḥdš* to express the duration of the action - the burying of Gog and his multitude with purifying purposes. The only occurrence of *yrḥ* in (6)c is again in the class *time units*. In this case the syntagm *b* 'in' + *yrḥ* + cardinal numeral denotes the period of time in which the action takes place - the loss of the three shepherds.

(7)   a.   Is 1:13-14
             ¹³ *l' twsypw hby' mnḥt-šw' qṭrt tw'bh hy' ly ḥdš wšbt qr' mqr' l'-'wkl 'wn w'ṣrh:* ¹⁴ *ḥdšykm wmw'dykm śn'h npšy hyw 'ly lṭrḥ nl'yty nś':*
             ¹³ 'Bring no more useless offerings, incense disgusts me. / New moon, sabbath, holy convocation - I cannot stand wickedness combined with solemn assembly.' // ¹⁴ 'I hate your new moons and festivals, / they have become a burden to me, I am tired of putting up with them.'[31]

       b.   Am 8:5
             l'mr mty y'br hḥdš wnšbyrh šbr whšbt wnptḥh-br lhqṭyn 'yph wlhgdyl šql wl'wt m'zny mrmh:
             'who say: "When will the new moon pass, so that we may sell our grain; and the shabbath, so that we may open our stores of grain?" - who reduce the quantity (ephah), while raising the price (shekel); and cheat with crooked scales;'[32]

One can observe the polysemy of *ḥdš* also in the poetic language. In (7)a, the noun parallels the lexemes *šbt* 'sabbath', *mqr'* '(sacred) assembly, convocation' and *mw'd* '(time of) festivity', which unsurprisingly indicate festivity. Another sign of the change of class is that the 3rd ps. m. pl. clitic *-km* is attached to *mw'd* and *ḥdš*, which in conjunction with these lexemes conveys the relation of belonging felt by every member of the community. Therefore, festivities are imbued with a unique feeling of self-determination. To this picture belongs also the holiday of New Moon.[33] For (7)b identifying the classeme was quite challenging. The translation, that was mentioned, makes a definitive choice in favour of the class *feasts*. However, if we change "When will the new moon pass" to "When will the month pass […]" the passage makes perfect sense. Although this is an interesting hypothesis, it does not account for the reason why the merchants cannot trade and must wait the end of the month in order to resume their business activities. Because it is a holiday, the feast of New Moon prescribes that all work must be suspended. Hence, the remark of the merchants would be more appropriate in this context. However,

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[31] Translation by Blenkinsopp (2000: 178).
[32] Translation by Andersen and Freedman (1989: 799-800).
[33] See Blenkinsopp (2000: 184).

the two possibilities are sound. Not by chance in Arad(6): 5:12-13 and Ne 7:72 one reads *bṭrm yʿbr ḥḥdš* 'before the month/New Moon passes', and *wygʿ ḥḥdš hšbyʿy* 'when the seventh month arrived'. Here the lexeme is once again ambiguous. In the second passage the ordinal numeral dissolves any doubt. If the verb had been the same in both sentences, it would have been easier but it is interesting to observe that in both syntagms verbs of motion are found, one that expresses passage, that is the end, the other the arrival, that is the beginning of the time which *ḥdš* denotes. As a result, the syntagmatic context is not decisive in this case.[34]

(8)   Jer 2:24
             prʾ lmd mdbr / bʾwt npšw šʾph rwḥ tʾnth my yšybnh / kl-mbqšyh lʾ yyʿpw
             bḥdšh ymṣʾwnh:
             'a wild ass used to the wilderness / in her desirous craving sniffing
             wind in her season who can bring her back? / All who seek her need
             not tire themselves in her month they will find her.'[35]

We are presented with another difficult passage in (8). The syntagm *b* 'in' + *ḥdš* + ps. f. s. clitic pronoun *-h* 'her' + *mṣʾ* 'to find' 0/1 + paragogic *n* + 3rd ps. f. s. clitic pronoun *-h* 'her' is attested only in this passage. The translation shown above refers neither to the class *time units* nor could it refer to *feasts*. Herein lies the difficulty in interpreting the text. Lexical parallels shed some light on the matter: *ḥdš* stands in paradigmatic opposition to *ʾwh* 'desire' and to *tʾnh* 'season of heat'.[36] The latter is, unfortunately, a *hapax*. HALOT and BDB both refer to the estrus cycle and there can be no doubt that it lies within a well-defined time span. It is certainly possible, but unfortunately unverifiable, that this is the main reason behind the choice of *ḥdš* - a lexeme usually denoting a time period - in order to convey the same meaning as *tʾnh*. However, the focus here is not on time, but on a recurring physiologic state characteristic of some mammals.

We cannot exclude the possibility that what we have here is a figurative use of the lexeme unique to this passage. Without additional data judgement must be suspended. Hence, these data will not be taken into account during componential and paradigmatic analyses.

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[34] On this matter see Renz and Röllig (1995-2003, vol. 1: 365). As for Am 8:5 see also Andersen and Freedman (1989: 804-806).

[35] Translation by Lundbom (1999: 280).

[36] See Lundbom (1999: 282).

5.4 *Poetical Hebrew of Hosea (EBH3)*

(9)   Hos 2:13
             whšbty kl-mśwśh ḥgh ḥdšh wšbth wkl-mwʿdh:
             'And I will end all her rejoicing: Her festivals, new moons, and sab-
             baths - All her festive seasons.'

The data pertaining to *ḥdš* in Hosea is consistent with what we observed
in the preceding corpora concerning the class *feasts*. The lexical unit occurs
once again alongside *šbt* and *mwʿd*, with the addition of *ḥg* 'feast (associated
with pilgrimage)'. It is worth noting that all the quoted lexemes receive the
3rd ps. f. s. clitic pronoun *-h*, as seen in the early poetical *corpus*.[37]

5.5 *Juridical-Cultic Hebrew (EBH4)*

(10)   a.   Lv 23:5
             bḥdš hrʾšwn bʾrbʿh ʿśr lḥdš byn hʿrbym psḥ lyhwh:
             'In the first month, on the fourteenth day of the month, at twilight,
             there shall be a passover offering to YHWH.'

       b.   Dt 21:13
             whsyrh ʾt-śmlt šbyh mʿlyh wyšbh bbytk wbkth ʾt-ʾbyh wʾt-ʾmh yrḥ ymym
             wʾḥr kn tbwʾ ʾlyh wbʿlth whyth lk lʾšh:
             'and [she will] discard her captive's garb. She shall spend a month's
             time in your house lamenting her father and mother; after that you
             may come to her and possess her, and she shall be your wife.'

(10)a and (10)b confirm both lexemes as belonging in the class *time units*
for the juridical-cultic corpus. In (10)a *ḥdš* designates the monthly calendar
unit specified by the ordinal numeral in dates. Moreover, the syntagm *b* +
cardinal numeral + *l* 'related to/of' + *ḥdš* places the described action in a
specific day of the month. (10)b constitutes the only instance of *yrḥ* within
the corpus: the lexeme denotes the time span of a month that amounts to
the duration of the action.

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[37] See the curious translation and the relevant remarks shown in Andersen and Freed-
man (1980: 215-250). It seems unnecessary to see here a case of metonymy, such that *ḥg*, *ḥdš*
and *šbt* would denote each a different kind of feast on the basis of their annual, monthly and
weekly periodicity, respectively.

(11) Ezek 46:1
kh-'mr 'dny yhwh š'r hḥṣr hpnymyt hpnh qdym yhyh sgwr ššt ymy hm'šh wbywm hšbt yptḥ wbywm hḥdš yptḥ:
'Thus said the Lord YHWH: - The gate of the inner court which faces east shall be closed on the six working days; it shall be opened on the sabbath day and it shall be opened on the day of the new moon.'

Syntagmatic relations in (11) clearly show that the referent is not the time unit, but rather the feast of New Moon. The definite article *h-* and the construct state syntagm of *ywm* 'day' with *ḥdš* prove the inadequacy of the meaning 'month'. Moreover, the parallelism between *ḥdš* and *šbt* dispels any lingering doubts.

5.6 *Late Historical-Narrative Hebrew (LBH1)*

(12) a. 2Chr 3:2
wyḥl lbnwt bḥdš hšny bšny bšnt 'rb' lmlkwtw:
'He began to build on the second day of the second month of the fourth year of his reign.'

b. 1Chr 3:4
ššh nwld-lw bḥbrwn wymlk-šm šb' šnym wšš ḥdšym wšlšym wšlwš šnh mlk byrwšlm:
'Six were born to him in Hebron. He reigned there seven years and six months, and in Jerusalem he reigned thirty-three years.'

In comparison to the homologous corpus within EBH, i.e. EBH1, one does not notice sensible variations in the use of the lexeme. The same system for dating events or individuals is employed. The syntagmatic context seems to remain largely unchanged. We still find *b* + *ḥdš* + ordinal numeral in dates. Alone or together with cardinal numerals the substantive expresses time duration. The paradigmatic opposition between *ḥdš* and *šnh* is still active, where the former is used to measure segments of a year.

As we have seen in EBH1 the use of numerals for identifying the different months is parallel to that of proper names.[38]

It is worth noting the absence of *yrḥ* from the late historical-narrative language, which would seem to confirm the end of the process of substitution of *ḥdš* for *yrḥ*.

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[38] At this synchronic level the Babylonian calendar had taken the place of the ancient Canaanite one. Hence, the months are assigned different names.

(13)   Ezr 3:5
              w'ḥrykn 'lt tmyd wlḥdšym wlkl-mw'dy yhwh hmqdšym wlkl mtndb
              ndbh lyhwh:
              'Followed by the regular burnt offering and the offerings for the new
              moons and for all the sacred fixed times of YHWH, and whatever
              freewill offerings were made to YHWH.'

(13) documents the use of *ḥdš* within the class *feasts*. Once again the
parallelism with *mw'd* reveals the correct classeme. The ritual context is con-
firmed by the presence of *'lh* 'burnt offering'. The referent is the New Moon
celebration during which a sacrifice was performed.

5.7 *Poetical Hebrew of Job (LBH3)*

(14)   a.   Job 14:5
              'm ḥrwṣym ymyw mspr-ḥdšyw 'tk ḥqw 'śyt wl' y'bwr:
              'His days are determined; You know the number of his months; You
              have set him limits that he cannot pass.'

       b.   Job 39:2
              tspr yrḥym tml'nh wyd't 't ldtnh:
              'Can you count the months they must complete? Do you know the
              season they give birth?'

Despite the many stylistic choices unique to the author of the poetic
sections included in the Book of Job, which result in verses of rare beauty,
the nature of the two lexemes as time units is rather evident.

(14)a shows *ḥdš* in opposition to *ywm* 'day'. Both are preferred to *šnh*
'year' in order to present human life in its most distinctive feature, i.e. that it
is bound to end. This stylistic choice conveys a much more powerful image
of human existence as inherently limited. Measuring a lifetime by days and
months, when years would be normally required for such an extended time
segment, gives to that sense of limit a much more disturbing vividness. This is
further evidenced by the fact that *mspr* 'number' precedes *ḥdš* in construct state.

As for *yrḥ*, similar conclusions can be drawn from (14)b, where it takes
the role of object for the verb *spr* 'to count' 0/1.[39] The lexeme refers to the
gestation period of does.

When the distributional data about the two lexemes were presented at the
beginning of this paper, one could not help but notice that *yrḥ* is unexpectedly
more frequent than *ḥdš* in LBH3. Moreover, this is the only LBH corpus that

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[39] Incidentally, one can notice the same root *SPR* as in *mspr* 'number', cited above.

attests it. Examining the rest of the data, this is by all means an anomaly and one with no obvious explanation. The two substantives seem interchangeable as *allotria*, that is stable variants not influenced by context. Since *yrḥ* shows more occurrences than *ḥdš*, the suggested theory that considers the former as an archaism, does not seem acceptable for this functional language. However, it is advisable to exercise caution, given the scarcity of instances of the two lexemes. A study of later linguistic phases, namely the language of Ben Sira', of the Dead Sea Scrolls and of the Mishnah is necessary to test the validity of said theory.

6. *Componential Analysis*

Based on the data presented above, the different lexical units will be identified and their meaning described by means of their distinctive semantic features. Those units that occur only once in a functional language will be excluded from the analysis, since they do not belong to the lexical field in those languages.

The sequence of semes will adhere to the following pattern: 'LF feature + class + dimension + x feature + y feature […]'.

6.1 *Early Historical-Narrative Hebrew (EBH1)*

The analysis has shown the existence of three lexical units:

ḥdš[1] "month" → "time" + "time units" + "objective dimension" + "astronomical" + "period of 29 days" + "definite"

ḥdš[2] "(day of) New Moon" → "time" + "feasts" + "technical-religious dimension" + "astronomical" + "definite"

yrḥ "month" → "time" + "time units" + "objective dimension" + "astronomical" + "period of 29 days" + "definite"

The first distinctive feature is obviously that pertaining to the entire lexical field, 'time'. It sets apart all these lexemes from every other lexeme. The various classes have already been discussed in § 3. As far as dimensions are concerned, see § 7.1. This leaves three additional semantic features to be accounted for. The first is the feature 'astronomical', which is common to several lexemes belonging in the lexical field. This trait describes the profound link between the movement of celestial bodies and time measurement. As for *ḥdš*[1], *ḥdš*[2] and *yrḥ* the focus is on lunar phases. Every 29 days, that is, every month the Moon shows the same phase to Earth. Hence, the subsequent feature, 'period of 29 days'. The position relevant to *ḥdš*[2] is reached by the Moon

when a conjunction between the satellite, Earth and the Sun occurs, such that the lunar disc is not visible. Since it was directly related to the rhythm of agricultural life, in ancient times this moment assumed a festive character for many cultures. The semantic feature 'definite' indicates that the denoted portion of time has well-defined limits.

Data reveal, and the semic composition shown above reflects this, that *ḥdš*[1] and *yrḥ* are interchangeable variants. The fact that the latter virtually disappears from the rest of the functional languages testifies to its prosaic character. However, this is not consistent with the situation observed in LBH3.

6.2 *Early Poetical Hebrew (EBH2)*

Two lexical units can be found in EBH2:

> *ḥdš*[1] "month" → "time" + "time units" + "objective dimension" + "astronomical" + "period of 29 days" + "definite"

> *ḥdš*[2] "(day of) New Moon" → "time" + "feasts" + "technical-religious dimension" + "astronomical" + "definite"

As far as the early poetical language is concerned, *yrḥ* does not belong in the lexical field.

6.3 *Juridical-Cultic Hebrew (EBH4)*

The data are consistent with those observed in the early poetical corpus:

> *ḥdš*[1] "month" → "time" + "time units" + "objective dimension" + "astronomical" + "period of 29 days" + "definite"

> *ḥdš*[2] "(day of) New Moon" → "time" + "feasts" + "technical-religious dimension" + "astronomical" + "definite"

6.4 *Late Historical-Narrative Hebrew (LBH1)*

The same two lexical units were identified as in EBH2 and EBH4:

> *ḥdš*[1] "month" → "time" + "time units" + "objective dimension" + "astronomical" + "period of 29 days" + "definite"

> *ḥdš*[2] "(day of) New Moon" → "time" + "feasts" + "technical-religious dimension" + "astronomical" + "definite"

Comparing the two historical-narrative corpora, one notices the absence of *yrḥ* from the late one.

6.5 *Poetical Hebrew of Job (LBH3)*

The following lexical units are identified:

ḥdš[1] "month" → "time" + "time units" + "objective dimension" + "astronomical" + "period of 29 days" + "definite"

yrḥ "month" → "time" + "time units" + "objective dimension" + "astronomical" + "period of 29 days" + "definite"

It is worth noting that in the poetical corpus of Job *ḥdš*[2] disappears. On the contrary, *yrḥ* is present.

7. *Paradigmatic Analysis*

7.1 *Early Historical-Narrative Hebrew (EBH1)*

As far as the topic of this paper is concerned, two dimensions can be distinguished: the *objective* dimension and the *technical-religious* one.[40] The former includes the lexemes pertaining to the field that are used to place events/phenomena in time from an objective point of view. The main goal is that of devising a system through which every external observer can obtain temporal coordinates for any given event/phenomenon. And said coordinates are valid for every observer. There is no room for interpretation. Since lexemes like *ḥdš*[1], *yrḥ*, *bqr* 'morning', *šnh* 'year', *ywm* 'day' etc. belong in this dimension, they stand in paradigmatic opposition to other members of the field like *ʿwlm* 'the remotest time', *qdm* 'ancient time' etc., which belong in the *subjective* dimension, or to *ḥdš*[2], which belongs in the *technical-religious* dimension. As far as the technical-religious dimension is concerned, the perspective from which the observer experiences time is a ritual one. Time is perceived through its reoccurring cycles, that mark the social and agricultural life of the community, and for this reason it enters the realm of the sacred. Therefore, the new moon is not only an astronomical phenomenon through which one can measure time, but also a means of self-determination for the community and a guarantee that order will be preserved.

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[40] For a definition of the concept of 'dimension' see Zatelli (2004: 135-136).

ḥdš² stands in opposition to *ḥdš¹* and *yrḥ* by virtue of its dimensional and class traits.

yrḥ belongs in the objective dimension. *ḥdš¹* and *yrḥ* stand in gradual opposition to *šnh* and to *ywm*.

7.2 *Early Poetical Hebrew (EBH2)*

The same remarks apply to the early poetical language. Given its absence, the oppositions between *yrḥ* and and the other two lexical units are no longer active.

7.3 *Juridical-Cultic Hebrew (EBH4)*

The opposition between *ḥdš¹* and *ḥdš²* by virtue of their dimension and class is still active. The former belongs in the objective dimension, whilst the latter in the technical-religious one. *yrḥ* is no longer functional.

7.4 *Late Historical-Narrative Hebrew (LBH1)*

No change is observed in the paradigm. The gradual opposition between *ḥdš¹*, *šnh* and *ywm* remains unchanged. The paradigm shows no traces of *yrḥ*.

7.5 *Poetical Hebrew of Job (LBH3)*

In LBH3 the opposition between *ḥdš¹* and *ḥdš²* seems no longer functional, given that there is no trace of the latter. On the contrary, *yrḥ* can be found as the same interchangeable variant of *ḥdš¹*, both belonging in the objective dimension and in the class *time units* as in EBH1. Their gradual opposition to *šnh* and *ywm* is active.

Whether this anomaly has to be ascribed to the diatopically distinct character of this functional language, it is hard to discern without having examined post-biblical data. It may well be an ancient element preserved here and lost elsewhere. However, it may also be due to a fortuitous circumstance in the transmission of the text, if one takes account of the scarcity of data.

8. *Conclusions*

The semantic study of *ḥdš* and *yrḥ* proposed in this paper has led to the conclusion that it is necessary to distinguish three lexical units, of which two are interchangeable variants. The theory according to which *yrḥ* would be the older lexeme designating 'month', subsequently superseded by *ḥdš¹*, is destined

for the time being to remain just that, a theory.[41] If we exclude LBH3, what can be observed is a gradual fading of *yrḥ* into non-existence during the transition from EBH to LBH. Before one can draw any final conclusion, it will be a necessary step to examine the corpora of Ben Sira', of the Dead Sea Scrolls and of the Mishnah, in order to gain an overall perspective on this matter.

In order to provide a comprehensive picture of the lexical field of time a study of all lexemes in all the functional languages is required. Such a study goes well beyond the scope of and the limits imposed to this paper. Focussing on these lexemes has nonetheless allowed us to discern the structure of the lexical field pertaining to these units. In ABH, EBH3 and LBH2 the field does not seem to include these substantives. This could be due to a fortuitous circumstance in the text tradition, since these corpora have a limited range. It could also mean that these units are typical of prose. In the other functional languages lexical combinations have helped define the two meanings that goes under the same signifier *ḥdš*. It is worth noting that the opposition between *ḥdš*^{1} and *ḥdš*^{2} seems to have enjoyed a relative stability throughout the whole arc of biblical Hebrew, a fate that was not shared by *yrḥ*.

Abbreviations

chs.   chapters
f.   feminine
fn   footnote
LF   lexical field
m.   masculine
ps.   person
pl.   plural
s.   singular
Gen   Genesis
Ex   Exodus
Lv   Leviticus
Nm   Numbers
Dt   Deuteronomy
Jos   Joshua
Jdg   Judges
1S   1Samuel
2S   2Samuel
1K   1Kings
2K   2Kings
Is   Isaiah
Jer   Jeremiah
Ezek   Ezekiel
Hos   Hosea

[41] See Renz and Röllig (1995-2003: 365, fn 4).

Jo   Joel
Am   Amos
Jon Jonah
Zc   Zechariah
Mal Malachi
Ps   Psalms
Prv Proverbs
Ezr Ezra
Neh Nehemiah

BDB   Brown, Francis, Samuel Rolles Driver and Charles Augustus Briggs (eds).
       1907. *A Hebrew and English Lexicon of the Old Testament*, Oxford:
       Clarendon Press.

DCH   Clines, David J. A. (ed.). 1993-2016. *The Dictionary of Classical Hebrew*.
       9 vols. Sheffield: Sheffield Phoenix Press.

DTAT   Jenni Ernst, and Claus Westermann (eds). 1978-1982. *Dizionario Teologico
       dell'Antico Testamento*. 2 vols. Torino, Casale Monferrato: Marietti
       (English translation from German in Jenni, Ernst, and Claus Wester-
       mann (eds). 1997. *Theological lexicon of the Old Testament*. Translated
       by Mark E. Biddle. Peabody, Mass.: Hendrickson Publishers).

GLAT   Botterweck, Gerhard Johannes, and Helmer Ringgren (eds). 1988-2010.
       Grande Lessico dell'Antico Testamento. 10 vols. Brescia: Paideia (English
       translation from German in Botterweck, Gerhard Johannes, Helmer
       Ringgren, and Heinz-Josef Fabry (eds). 1977-2004. *Theological Dic-
       tionary of the Old Testament*. Translated by David E. Green. 14 vols.
       Grand Rapids: Eerdmans).

HALOT Koehler Ludwig, Walter Baumgartner, and Johann Jacob Stamm. 1994-
       2000. *The Hebrew and Aramaic Lexicon of the Old Testament*. 5 vols.
       Leiden: Brill.

TNK   *Tanakh. The Holy Scriptures*. 1985. Philadelphia: Jewish Publication Society.

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    with Introduction and Commentary*. Garden City: Doubleday.
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