The productivity of adverbs and adverbials in Modern Hebrew

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1. Introduction

In different languages, the definition of adverbs and adverbials is very problematic and controversial. In their research on adverb classes in European languages (German, English, Dutch, French and Italian), Pittner, Elsner & Barteld (2005) state that these classes are very heterogeneous and therefore difficult to define.

Discussing Spanish, Salazar García (2007) reminds us that adverbs are usually considered very complex and heterogeneous, and this is the reason why we encounter enormous difficulties in defining them, both theoretically and descriptively. Since their semantic value and syntactic uses are highly divergent, it is hard to suggest a common definition and a coherent and systematic classification. Also, Maienborn & Schäfer (2011) comment that clear-cut definitions of adverbs and adverbials are difficult to formulate, as we define the word class adverb on the basis of the adverbial syntactic function.

One of the most argued questions among scholars is whether adverbs are an open or closed class. For Talmy (2000), they are a closed category, meaning that there is a limited number of such words and the class cannot be productive. Salazar García (2007) proposes to divide adverbs into two sub-categories. Adverbs of manner would be considered content words, i.e. an open class, while other adverbs, such as those of degree or negation, are function words or grammatical particles, i.e. a closed class.

Some scholars try to answer the question whether adverbs represent a special type of morphology. According to Giegerich (2012), English adverbs are not different from adjectives and have no morphology of their own, but share it with adjectives. Moreover, he claims that the adverb in English is not a lexical category but merely a specific modifier with a function performed by members of the category adjective, associated with contexts other than those traditionally associated with adjectives.

Pounder (2001) shows that, although German and English were historically similar regarding the use of adverbs, they differ from each other. Diepeveen & van de Velde (2010) state that, in contrast to English, which, according to them (and contrary to Giegerich's aforementioned statement), marks the distinction between adjectives and adverbs with an adverbial suffix, Dutch and German allow adjectives to be used adverbially without extra morphology.

Following some of these claims, we may expect that not only the grammatical category, but also individual adverbs, would tend to become unrecognizable as a specific part of speech in a language and be integrated with adjectives. However, it appears that this is not the case for Modern Hebrew.

With respect to the frequency of the different parts of speech in Hebrew, Schwarzwald (2019) points out that adverbs are among the frequent words that are stable, meaning that they do not change or disappear from one period to another. Moreover, she adds that even new processes in the language do not influence them. Similarly, Muchnik (2000) found that

Hebrew adjectives used in slang are formed according to known patterns or common phonological structures.

The purpose of the present study is to examine the presence of adverbs and adverbials in Modern Hebrew according to their morphological formation, and see whether they are stable or have changed from the classical to the modern language. I will try to prove that they are productive, meaning that they not only remain in the language as lexical items, but also expand in known or similar patterns.

2. Adverb formation and productivity

In many European languages, adverbs are clearly distinguished by the suffixes added to adjectives. For instance, we find adverbs ending in *-ly* in English, *-lich* in German, *-ment* in French, and *-mente* in Spanish, Italian or Portuguese. However, these suffixes are not imperative, as we can find suffix-less adverbs like *well*, *super*, *genial*, etc.

In a diachronic study on British English, Tagliamonte & Ito (2002) state that the use of adverbs with zero suffix increased over time, when compared with those with the -ly suffix. While this process was even greater in American English, in British English the use of zero-suffix adverbs was considered an informal, colloquial, familiar, and even vulgar style, but nonetheless it did not disappear. They further add that the longitudinal linguistic change regarding the use of zero-suffix adverbs is attributed to social class or education. They show that less educated males used more zero-suffix adverbs, and claim that this is an example of the social and historical development.

When dealing with grammaticalization as an adverbial creator, Killie (2015) shows that the -ly suffix has come to be used in a number of contexts and functions where it was not originally used, because in Old English most adverbs did not present any suffix. During the nineteenth and twentieth centuries, the adverbs with -ly suffix became extremely productive. The suffix was also attached to present participles in adverbial functions. Most adverbs ending in -ly are manner adverbs or intensifiers, such as *perfectly, completely, totally, absolutely*. Due to their increasing productivity, Killie (ibid.) states that the term 'adverbialization' seems most appropriate.

In a study on English literature, Killie (2000, 2022) found that the drift from more literate to more oral styles led to an increase of adverbials. The spread of -ly suffixes, including the development and diversification of stative adverbs, is bound up with new genres. In addition, many of the adverbs in her corpus had a manner or a manner-like function. Moreover, the process had a snowball effect, meaning that the more -ly adverbs in the language, the more such adverbs we are likely to get. She adds that, psychologically, people get so used to adverbs, that they prefer using them instead of adjectives or other alternatives. This trend was attested in popular, non-expository registers.

It is possible that not only in English, but also in other languages, the use of adverbs will increase over time, meaning that we may witness their productivity. Van Marle (1985, 1992) defines productivity as a process by means of which the lexicon of a language can systematically or regularly be extended. He further states that new coined words must have parallel forms in the language. Creative formations typically have special connotations, such as elements of humor, irony or contempt.

3. Hebrew adverbs and adverbials

As stated by Berman (1987), Modern Hebrew is a particularly good case for the analysis of lexical productivity, because the language represents a sort of "diglossia" between the puristic

requirements of prescriptive or official norms compared with the colloquial usage manifested by native speakers of different levels of education.

Nir & Berman (2010) and Bolozky & Berman (2020) maintain that Modern Hebrew adverbs represent an intermediate category between the open class of content words and closed class of function words, and typically lie between the two extremes of lexicon and grammar. Regarding morphological and syntactic aspects, Ravid & Shlesinger (2000) show that Hebrew adverbs are fuzzy and very diverse. They argue that they present an atypical character, as they do not resemble any other content word. All Hebrew verbs and many nouns and adjectives are formed by a stem or a consonantal root and a vocalic pattern and can be inflected, while adverbs do not make extensive productive use of morphological structure, and do not inflect.

Therefore, Ravid & Shlesinger (ibid.) describe Hebrew adverbs as a peripheral lexical category in a language that defines its content words by both derivational and inflectional markers. They emphasize that Modern Hebrew does not really present a productive morphological class of adverbs, despite its synthetic Semitic character.¹ They add that Hebrew nouns, verbs and adjectives can be included in morpho-lexical classes, while the function of adverbials of manner cuts across the lexicon, morphology, semantics, and syntax.

While all Hebrew adjectives can be inflected according to gender and number, most adverbs do not present this possibility. For example, the adjective *tov* 'good' (SING, MASC) can be inflected into *tova* (SING, FEM), *tovim* (PL, MASC) and *tovot* (PL, FEM). The parallel normative adverb would be *heitev* 'well', but it is not regularly used in colloquial language, and the non-inflected adjectival form *tov* is preferred. It is possible then, that this morphological differentiation will prevent adverbs from disappearing in Hebrew.

Note that Modern Hebrew adverbs may derive into adjectives, by adding the suffix -i, like in *mamaši* 'real', '*axšavi* 'current', *pit'omi* 'sudden', *hinámi* 'gratuitous', and, according to Bolozky (1999), this process is quite productive. In rare cases, adverbs can be used as nouns by adding to them the plural suffix -im, such as *etmolim* 'yesterdays' and *émešim* 'last nights' in literary language.

As in other languages, we should distinguish between Hebrew adverbs and adverbials (or adverbial clauses), since adverbs constitute a lexical class, whereas adverbials are a functional and syntactic class, generally formed by a preposition followed by a noun.

Ravid (2020) claims that there is not a productive class of morphologically derived adverbs in Hebrew. Instead, they are expressed by prepositional phrases, zero-derived adjectives in colloquial usage, or inflected feminine suffixes attached to adjectives in very high register or literary style. To the contrary, Kogut (2002) points out that modern languages, among them Hebrew, contain formation patterns that enrich adjectives and adverbs, which contributes to the stylistic diversification.

In what follows, I will try to prove that Modern Hebrew adverbs are an open and productive class. The same is true for adverbials, which are composed of existing content words joined with function particles, mostly prepositions. In both cases, they are productive in recent years, particularly in colloquial language and in Israeli slang.

For this purpose I have used two dictionaries, *Rav-Milim* [Many Words] (Choueka 2010), which is updated online, and *Milon HaSleng HaMakif* [Dictionary of Israeli Slang] (Rosenthal 2005).

¹ Muchnik (2004) shows that the synthetic character of Hebrew is changing into a more analytic way.

4. Adverbs

Many adverbs were found in the present survey, and they will be exemplified here according to their formation categories. In some cases, their form continues patterns already found in Classical Hebrew, such as unmarked monosyllabic adverbs, while in other instances they consist of grammaticalized words or are formed in totally new ways.

4.1. Unmarked adverbs

Basic Hebrew adverbs already found in Classical Hebrew and still used to this day are morphologically unmarked and underived. Here are some examples:

(1) a. kan 'here'
b. šam 'there'
c. kax 'so'
d. az 'then'
e. po 'here'
f. 'od 'yet'
g. me'od 'very'
h. le'at 'slowly'
i. levad² 'alone'
j. stam³ 'just'

The aforementioned adverbs are peculiar, because they are monosyllabic and are not ruled by any typical pattern, like the combination of a consonantal root with a known vocalic pattern. Non-derived stems like these are also used in some nouns, considered ancient words (Schwarzwald 2001). No new adverbs were found in a similar form.

4.2. Discontinuous versus linear formation

Besides these unmarked adverbs, which are a small minority, Modern Hebrew adverbs are found in two different formation styles, the classical discontinuous form, meaning the combination of consonantal roots with vocalic patterns, and the linear formation attaching prefixes or suffixes to a base or stem (Nir 1993). The productivity of each of them can sometimes distinguish between classical and modern formation styles (Muchnik 2004). In what follows, I will first present adverbs found in discontinuous formation (Section 4.3), and afterwards those in linear formation (Section 4.4).

4.3. Discontinuous formation

Not many adverbs formed by consonantal roots and vowel patterns were found in the present study, and all of them actually represent a secondary use of existing parts of speech, such as nouns, absolute infinitives, adjectives, nominal forms and present participles, as we can see in the next sections.

² In the words *me'od*, *le'at* and *levad*, /e/ represents a shwa and is not counted as a vowel.

³ The word *stam* is also used in humorous language prolonging the vowel *a* and becoming *staaam*, meaning 'just kidding'.

4.3.1. Nominal patterns

Most Hebrew nominal patterns are disyllabic. Some adverbs are formed in the pattern CVCV(C), which is known in many words (Cohen-Gross 1997; Schwarzwald & Cohen-Gross 2000). Here are some examples of adverbs formed in this pattern and used to this day:

- (2) a. *maħar* 'tomorrow'
 - b. *ħaval* 'it is a pity'
 - c. mamaš 'really'
 - d. vaday 'certainly'

Some disyllabic nouns are used as adverbs in Modern Hebrew, and particularly in slang. For instance:

- (3) a. 'anak 'giant[ly]'b. hamon 'multitude = plenty'
 - c. *halom* 'dream[ily]'

In all these cases, the original nouns appear in the Bible, and were later derived into adjectives by adding the suffix -i, namely 'anaki, hamoni and halomi. In recent years, the nouns were adopted as adverbs. The form 'anaki is actually unnecessary, because the noun 'anak is also used as an adjective, similarly to nora'i shown in (7c).

Special disyllabic adverbs were found, where the whole word is repeated, like in the next examples:

- (4) a. *kaxa-kaxa* 'so-so'
 - b. *rega'-rega'* 'a moment-a moment'
 - c. para-para 'cow [after] cow'
 - d. 'eħad-'eħad 'one [by] one'
 - e. *turki-turki* 'Turk [after] Turk'
 - f. nora-nora 'terribly-terribly'

4.3.2. Absolute infinitives

Another form of adverbs, regularly used in Classical Hebrew, is identical to absolute infinitives, which are rarely used nowadays (see Schwarzwald 1989). However, some of these adverbs remain in use, among them:

- (5) a. *harbe* 'many'
 - b. hayšer 'directly'
 - c. heitev 'properly'
 - d. harhek 'distantly'
 - e. halox vašov 'back and forth'
 - f. *halox veħazor* 'back and forth'

The idiomatic expressions *halox vašov* and *halox veħazor* (5e,f) contain two absolute infinitives each, and are used in an adverbial-aspectual sense in literary writing, where the meaning is 'doing something repeatedly', but also in colloquial language meaning 'round trip' (Saydon 2018). Absolute infinitives were also found by Muchnik (1994) in a very popular gossip section in the 1990's, although they were not used as adverbs but as verb constructions, like these:

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- (6) a. *halox halxa* 'she went'
 - b. šalom šilem 'he payed'
 - c. baroz hibriza 'she shirked'⁴

Example (6a) above is still used, mostly in children's literature. The other examples (6b,c) are only typical in the gossip genre or humorous or ironical speaking and writing.

4.3.3. Adjectival form

Adverbs may also present identical forms as basic masculine adjectives, as mentioned by Amir Coffin & Bolozky (2005) and Schwarzwald (2001). For instance:

(7) a. *yafe* 'nice[ly]'
b. *na'im* 'pleasent[ly]'
c. *nora* 'awful[ly]'
d. *gadol* 'big, great[ly]'
e. *ħazak* 'strong[ly]'
f. *male* 'ful[ly]'
g. *hazuy* 'hallucinatory, odd'

In these cases, the difference between the words is that all adjectives can be inflected according to gender and number, whereas adverbs have only one unchangeable form. All these words are known in Classical Hebrew, but they were used there only as adjectives, while in Modern Hebrew they are also used as adverbs. In the case of *nora* (7c), it appears that the use as an adverb is preferred, since in popular language a parallel form was coined, *nora* '*i*, using the typical form of a derived adjective and allowing it to be inflected. The use of (7d-g) as adverbs is only known in colloquial language.

4.3.4. Present Participles

In Classical and Modern Hebrew, we find adverbs using active and passive present participle forms. The same patterns are used as verbs or adjectives inflected according to gender and number, whereas adverbs are only used in the singular masculine form. These patterns are: CoCeC, CaCuC, meCaCeC, maCCiC, niCCa, muCCaC, meCuCaC. For example:

- (8) a. *holex* 'it goes = agreed'
 - b. *sagur* 'closed = agreed'
 - c. *nifla* 'wonderful[ly]'
 - d. mukdam 'early'
 - e. me'uħar 'late'
 - f. metsuyan 'excellent[ly]'

Many adverbs were coined in these patterns in recent years in colloquial and slang language. Below are some instances.

- (9) a. hores 'destroying'
 - b. madhim 'amazing'
 - c. *mehamem* 'stunning'

⁴ In examples (6b,c) and in other cases found in the same corpus, the absolute infinitive is used in a wrong form, probably because this is the most known construction.

- d. *matrif* 'maddening'
- e. *mešagea* ' 'making crazy'
- f. metamtem 'making stupid'

All of the words in (9) have a positive connotation when used in slang, whether as adjectives or as adverbs. These cases are similar to the new -ly adverbs in English used as intensifiers, as mentioned by Killie (2015).

4.4. Linear formation

As mentioned before, beside discontinuous forms, adverbs may present linear formation, meaning prefixed or suffixed adverbs, as shown below.

4.4.1. Prefixed adverbs

In this case, we find only one type of prefix, ha-, which is actually the definite article added to a noun. Although we are dealing with formations with an added particle, they are considered here as adverbs, meaning lexical items, and not adverbials. Here are some examples:

- (10) a. *hayom* 'today'
 - b. *haboker* 'this morning'
 - c. *ha* 'erev 'this evening'
 - d. *halayla* 'this night'
 - e. *hašavua* ' 'this week'
 - f. hahodeš 'this month'
 - g. hašana 'this year'
 - h. *harega* ' 'this moment'
 - i. *hašniya* 'this second'

The translation into English can be confusing, as there are different Hebrew expressions using ha- in the meaning of the definite article. For instance, **hayom haze** 'this day', **haboker haze** 'this morning'. Note that in these cases the article is used before both words. Indeed, in Classical Hebrew, these words were used as article + noun, and not as adverbs. The examples in (10h,i) are typical of colloquial language.

4.4.2. Suffixed adverbs

In Classical Hebrew, some adverbs were marked by the suffixes -am or -om, added to a base or stem⁵, and some of them are still used to this day. For instance:

- (11) a. hinam 'gratis'
 - b. dumam 'quietly'
 - c. *yomam*⁶ 'during the day'
 - d. *reikam*⁷ 'empty'
 - e. omnam 'truly'
 - f. *haumnam*? 'indeed?'

⁵ Schwarzwald (2001) calls them pseudo-base stems.

⁶ The word *yomam* is formed by the noun *yom* 'day', and is only used in the expression *yomam* valeyl or *yomam* valayla 'day and night'.

⁷ This is the only case found, where the base *reik* is used as an adverb, generally in spoken language, while *reikam* is only used in literary language.

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- g. pit'om 'suddenly'
- h. šilšom 'the day before yesterday'

In some cases, adverbs are derived from adjectives, adding to their stem the suffix -ot, which is normally a plural feminine suffix. However, this sort of formation is not productive, and the examples presented below are only used in literary language.

- (12) a. *ketsarot* 'shortly'
 - b. arukot 'longly'
 - c. berurot 'clearly'
 - d. yeširot 'directly'
 - e. 'amukot 'deeply'
 - f. gevohot⁸ 'highly'
 - g. kašot 'hardly'
 - h. kalot 'slightly'

A very productive and popular adverbial formation in Modern Hebrew is adding the suffix – it^9 to an existing noun. For instance:

- (13) a. *klalit* 'generally'
 - b. *išit* 'personally '
 - c. 'ekronit 'in principle'
 - d. sofit 'finally'
 - e. *yeħasit* **'relatively'**
 - f. zmanit 'temporarily'
 - g. rišmit 'formally, officially'
 - h. telefonit 'by phone'

All the adverbs in (13) were coined in Modern Hebrew, probably based on two words found in Classical Hebrew, *rešit* 'firstly' and *šenit* 'secondly'. These two adverbs are still used today, and in popular language people say *rešit kol* 'first of all' and *šenit kol* 'second of all'. This even expanded to another pair of expressions, *alef kol* 'a of all' and *bet kol* 'b of all'.¹⁰

In colloquial Hebrew we find some cases where the suffix -it is added to an already existing adverb, such as *pit'omit* (from *pit'om*) 'suddenly' or *miyadit*¹¹ (from *miyad*) 'immediately'.

Note that the Hebrew suffix -i may transform a noun into an adjective. Therefore, we could say that the aforementioned adverbs were derived from adjectives (by adding the consonant -t).

Another suffix used to create adverbs is -ayim, probably from the number $šnayim^{12}$ 'two', as seen in these examples:

- (14) a. pa'amayim 'twice'
 - b. kiflayim 'twofold'
 - c. šiv 'atayim 'sevenfold'

⁸ A similar expression is used in literary language, *gevoha-gevoha* 'high-high', based on a feminine adjective.

⁹ On the expanded use of the suffix -it in Modern Hebrew see Muchnik (1996).

¹⁰ Compare with the popular redundant adverbial *besax hakol haklali* 'on the whole generally'.

¹¹ See in section 6 (26d) about the use of *bamiyadit* '[in the] immediately'.

 $^{^{12}}$ In Modern Hebrew, we also use the expression *pi šnayim* 'twice as much'.

- d. bentayim 'meanwhile'
- e. *moħrotayim* 'the day after tomorrow'

The origin of all of the aforementioned adverbs is in Classical Hebrew, and they are still used today, but no new items were found formed with this suffix. It would appear, then, that this category of adverbs is no longer productive. However, Schwarzwald (1996) found new items in literature, particularly for children. Most of these words were nouns, and only a few of them were adverbs, among them *kiflayim* 'twofold' and *šiv'atayim* 'sevenfold', mentioned in (14), as well as *šloštayim* 'threefold', *arba'atayim* 'fourfold' and *me'odotayim* 'lit. twice very', which are not regularly used.

5. Foreign words

Many adverbs added to Modern Hebrew were taken from foreign languages, mostly in their original form. As in other foreign words borrowed into Hebrew, their origin is not only in different languages, but even in different language families.¹³ Below are some examples of foreign adverbs.

(15) a. *fiks* 'perfectly' [English (fix)]
b. *revers* 'backward' [English]
c. *punkt* 'exactly' [German/Yiddish]
d. *de-lux* 'extra quality' [French]
e. *fanan* 'enjoyably' [Arabic]
f. *sababa* 'great, cool' [Arabic]
g. *aškara* 'really, truly' [Arabic]

In the next section (6, 29) we will see that not only foreign independent words are used in Modern Hebrew as adverbs, but also adverbial clauses.

6. Adverbials

Hebrew adverbials are generally formed by prepositions followed by a noun. However, in some cases the suffix -a is added to a noun, with the same meaning as the prefix -le, both indicating direction.¹⁴ In Classical Hebrew we find the suffix -a attached to names of places. For instance:

- (16) a. *efráta* 'to Efrat'
 - b. *harána* 'to Haran'
 - c. yotbáta 'to Yotbat'
 - d. mitsráyma 'to Egipt'
 - e. yerušaláyma 'to Jerusalem'

The adverbial formation related to names of places is only used in humorous speech nowadays. Nevertheless, it remains in use in words like these:

(17) a. (*le*)*má* '*la* 'up'
b. (*le*)*máta* 'down'

¹³ On the influence of foreign languages in Hebrew see Nir (1993) and Schwarzwald (1998).

¹⁴ Note that, while other suffixes are always stressed, in this case the stress in on the syllable before -a.

c. smóla 'to the left'
d. yamína 'to the right'
e. habáyta 'to the house = back home'
f. kadíma 'forward'
g. aħóra 'backward'
h. tsafóna¹⁵ 'to the north'
i. daróma 'to the south'

The words in (17a, b) are used in classical and literary language also without the prefix -le, i.e. $m\dot{a}$ 'la and $m\dot{a}ta$, but the longer form is used today. In popular and humorous speech, the words in (17f, g) are transformed into *kadímanit* and *ahóranit*, which can allude that the suffix -a is not always felt as referring to direction.¹⁶ This can also explain the use of the word sáma instead of sam 'there' and the popular redundant use of *lesáma* 'to there'.

It should be noted that Hebrew function words, and among them prepositions, are always enclitically used before content words.¹⁷ These prepositions are never stressed, and the stress remains in the original place of the main word.

The most popular preposition added to existing nouns is $be^{-in'}$, found in Classical and Modern Hebrew. For instance:

- (18) a. besimha 'joyfully'
 - b. *beratson* 'with pleasure'
 - c. *bexavana* 'on purpose'
 - d. berogez 'angrily'
 - e. *bekalut* 'easily'
 - f. *bekalei kalut* 'very easily'

Following this formation, we find many new coined adverbials in popular Hebrew, and particularly in slang, like these:

- (19) a. *behikon* 'on call'
 - b. *bešlifa* 'unsheathing'
 - c. *besratim* 'in movies = confused'
 - d. *beketa' tov* 'in a good matter'
 - e. *beketa' ra'* 'in a bad matter'
 - f. *beramot* 'in heights = extremely'
 - g. *beramot 'al* 'in super heights = extremely'

In some cases, the prefix be- is added to an adjective to form an adverbial. It can also include the article ha- becoming ba-. For example:

- (20) a. *begadol* 'in big = generally'
 - b. *be* '*anak* '[in] gigantic[ally]'
 - c. *baprati* '[in the] private[ly]'
 - d. *baragua* ' '[in the] calm[ly]'
 - e. *baninoah* '[in the] relaxed[ly]'

¹⁵ The words *tsafóna* and *daróma* are used in colloquial language also referring to time, i.e. 'before' and 'after' respectively.

¹⁶ Compare this to the use of *mikadima* and *meahóra* below.

 $^{^{17}}$ The only exception is *et*, the preposition that marks the accusative case.

f. *baktana* '[in the] small (FEM) = no big deal'

The preposition –*be* not only serves in the formation of one-word adverbials, but can also be added to four specific nouns denoting manner, ofen [MASC], *orah* [MASC], *derex* [FEM] and *tsura* [FEM], attached to an adjective, and forming a great number of adverbials. Here are some possibilities:

- (21) a. *be'ofen* iši 'in a personal mode'
 - b. *be'oraħ ħelki* 'in a partial manner'
 - c. *bederex tipšit* 'in a silly way'
 - d. betsura klalit 'in a general form'

Another way to create new adverbials in popular Modern Hebrew is by adding the preposition 'al 'on' to adjetives, such as these:

- (22) a. 'al $\hbar am$ 'on hot = red handed'
 - b. *'al batuah* 'on secure = securely'
 - c. *'al ratuv* 'on wet = for real'
 - d. *'al yaveš* 'on dry = not for real'
 - e. *'al reik* 'on empty = groundless'

The expressions in (22c,d) are used in the military, referring to maneuvers done with loaded or unloaded weapon respectively.

In some cases the preposition 'al is followed by the article ha- before a noun:

- (23) a. *'al ha 'okem* 'on the curve = crooked'
 - b. *'al hamazal* 'on the luck = haphazardly'
 - c. *'al hapanim* 'on the face = lousily'
 - d. *'al hakrašim* 'on the planks = lousily'
 - e. 'al hadaka '[exactly] on the minute'
 - f. 'al hašniya '[exactly] on the second'
 - g. 'al hagova 'on the height = doing great'
 - h. *'al hasus* 'on the horse = doing great'

Prefixes are sometimes followed by other prepositions (underlined here), forming an adverbial that can seem contradictory. Some of them are used in formal language, such as these:

- (24) a. *mibahuts* 'from [in] the outside'
 - b. *milefanim* 'from [to] front'
 - c. *miberešit* 'from [in] beginning'
 - d. *milexathila* 'from [to as the] beginning'

Following this process, adverbials were also coined in slang, by attaching different prepositions:

- (25) a. $be\underline{ke}$ 'ilu '[in] as if = not really'
 - b. *ba<u>mi</u>saviv* '[in the from] around'
 - c. *ba<u>be</u>toxo* '[in the] inside it'
 - d. *ba<u>bifnoxo</u> '[in the] inside it'*

In some cases, prepositions are added to existing nouns, adjectives or adverbs, and they create diverse forms of adverbials for the same meanings. For example:

- (26) a. *maher* 'quickly > *bimhirut* 'in quickness'
 - b. *klalit* 'generally' > *baklali* 'in the general'
 - c. *beintayim* 'meanwhile' > *levein*[*a*]*tayim* '[to] meanwhile'
 - d. *miyad > miyadit* 'immediately' > *bamiyadit* '[in the] immediately'
 - e. *mizman* 'from time' > *mimizman* '[from from] time = long time ago'

The preposition 'ad 'till' is used in many adverbial expressions in Israeli slang, some of them loan translations, such as these:

- (27) a. 'ad kan 'till here = this is enough'
 - b. 'ad ha'etsem 'to the bone'
 - c. 'ad hatsavar 'up to the neck'
 - d. 'ad ha'oznayim 'up to the ears'
 - e. '*ad hagag* 'up to the roof = extremely'

A special category of adverbials originated in Aramaic,¹⁸ and some of them are still used to this day. They are recognized by their suffix -in instead of the expected form -im, as shown below:

- (28) a. *bemeišarin* 'directly'
 - b. *ba'akifin* 'indirectly'
 - c. begilufin 'drunkenly'
 - d. *leserugin* 'intermittently'
 - e. *laħalutin*¹⁹ 'completely'
 - f. *laħalufin* 'alternately'

In Israeli slang we find many foreign words combined with Hebrew prefixes and used as adverbials. For instance:

- (29) a. *be'izi* '[in] calmly' [English]
 - b. *bedaun* 'in depression' [English]
 - c. *bešvung* 'on the move' [Yiddish]
 - d. *bestalbet* '[in] lazily' [Arabic]
 - e. *besababi* '[in] coolly' [Arabic]

7. Summary and conclusions

The present article demonstrates that in Modern Hebrew, adverbs and adverbials constitute an open class, as there are many and very diverse types of them used to this day, mostly denoting manner. Some of the items that are known from Classical Hebrew continue in use, while new adverbs and adverbials were coined in recent years, mostly using the same ancient patterns.

Among old adverbs still used today, we find monosyllabic unmarked and underived words. Marked adverbs coined nowadays include discontinuous formation according to patterns

¹⁸ They are found in the Mishna and the Talmud, written about 2,000 years ago.

¹⁹ A very trendy word used instead of *laħalutin* is *legamre*, also taken from Aramaic.

known from Classical Hebrew, such as nominal forms, absolute infinitives, masculine adjectives, and present participles. In addition, foreign words borrowed from European languages and Arabic are used today as adverbs.

Most of the adverbials found in this study are formed by diverse prepositional prefixes, and some of them by the suffix -a (for the same meaning as the prefix le-) added to nouns, adjectives or adverbs, among them foreign words.

We have seen that, indeed, adverbs and adverbials are an open class of content words, which are very productive in Modern Hebrew, whether in the standard language or in popular language and slang. They generally follow existing ways of formation, and in most cases add connotative meanings.

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