

Tense (Modern Hebrew)

I. INTRODUCTION

The term *tense* is used in two different manners in the linguistics literature, either to denote a morphological category of the verbal system, or to denote the semantic content of this category. In what follows, when referring to the values of the morphological category, small caps will be used (past, present, future); when referring to the semantic category, a capital letter will appear (Past, Present, Future).

In this entry, the semantic characterization of tense will be couched in the tradition of Reichenbach (1947) and his followers, mainly Hornstein (1990), Smith (1991), and Klein (1994), who see temporality in language as involving a topological relation between three time intervals: speech time (S), reference time (R), and event time (E) (\rightarrow Aspect). Under this approach, tense forms encode temporal relations between speech time and reference time, only indirectly relating event time to speech time. In turn, the temporal relation between reference time and event time expresses aspectual information and has to do with how the boundaries of the event are related to the reference time (Smith 1991; Klein 1994; Demirdache and Uribe-Extebarria 2000). This is further explained elsewhere (\rightarrow Aspect).

The following examples illustrate the necessity of assuming a reference time interval for the semantics of tense:

- (1) כִּבִּיתָ אֶת הָאוֹר? *kibita* 'et ha-'or?
turn.off.PAST-2MS. ACC the-light
'Did you turn off the light?'
- (2) כֵּן, הִילֵד יָשָׁן *ken, ha-yeled yašan*
Yes, the-child sleep.PAST.3MS
'Yes. The child was sleeping'.

When asking a question such as in (1) upon leaving the house, the inquirer seeks to find out whether the light has been switched off at the time of leaving home, which precedes the speech time, and not whether an event of

switching off the light by the addressee has generally occurred in the past (Partee 1973). Similarly, in example (2), which is the answer to (1), what is relative to the speech time is the time of leaving the house (R), and this is what the past tense morphology encodes. Importantly, example (2) clearly illustrates that the event time (E), in this case the time of sleeping, is not directly related to S. Specifically, the child may well continue to sleep at the relevant speech time or even beyond it. Thus, in (2), the event time exceeds the reference time and may overlap with the speech time.

The indirect relation between speech time and event time leads to the assumption, endorsed here, that there exists an additional time relevant to the semantics of tense: the reference time. For more explanations on the necessity of assuming a reference time interval for the semantics of tense see the references cited above.

There are three possible relations between speech time (S) and reference time (R):

- (3) a. R = S Present
b. R < S Past
c. R > S Future

2. TENSE FORMS

In Modern Hebrew, the past and future tense forms are inflected for person number and gender, and differ in their vowel pattern and position of person, number, gender marking: the past tense is a suffixed form, while the future is mainly prefixed. The present tense form is not inflected for person, only for number and gender, and is thus morphologically a participle (PTCP) (\rightarrow Participle).

Additional inflected forms in the system include the imperative, which for most verb patterns, is like the future tense form devoid of prefixes (\rightarrow Mood and Modality). There are also two non-inflecting forms: the infinitive (שֵׁם הַפְּעוּלָה *šem ha-po'al*) and the verbal-noun (שֵׁם הַפְּעוּלָה *šem ha-pe'ula*) (\rightarrow Infinitive, Verbal Noun). Morphologically, the infinitive is related

to the future tense and imperative forms in the vast majority of patterns (see table in (4)). The verbal-noun, although derivationally related to the verbal patterns, is fully nominal and is not considered as part of the verbal system, and is not listed in the table below (Ben-Asher 1976; Berman 1976; 1978:287–323; Ravid 2000). It will be briefly mentioned in the entry on aspect (→ Aspect).

The table below exemplifies the Modern Hebrew verbal system with forms inflected for 2FS. to illustrate affixation, in all the verbal patterns, except *pu'al* פועל and *huf'al* הופעל, which are the internal passives related to *pi'el* פעיל and *huf'al* הפעיל, respectively (→ Binyan, Inflection). Only agreement affixes are indicated as separated from the stem.

The Modern Hebrew verbal system also has one periphrastic form containing the past tense form of the verb *haya* 'to be' and the participle (5).

The periphrastic form appears only when the auxiliary is in the past tense. The combination of a future tensed auxiliary and the participle is not in use in Modern Hebrew, but was employed in Rabbinic Hebrew and can be found in modern literary texts, when a highly formal register is employed (though not necessarily with a habitual meaning) (6).

The periphrastic construction is used in Modern Hebrew to express habits and counterfactual modality (→ Mood and Modality).

It is important, at this point, to clarify that the participle/present tense form, which, like adjectives, inflects only for number and gender, does not pattern distributionally with adjectives (see Ben-Ḥayyim 1955; Rosén 1966; 1977). Firstly, the participle cannot normally appear with a future tense auxiliary. Conversely, adjectives may be preceded by both the past and future forms of the auxiliary verb *haya*, denoting states in the past or the future (7).

(4)

	present	past	future	imperative	infinitive	
קל <i>qal</i>	כֹּתֵבֶת <i>kotev-et</i>	כָּתַבְתְּ <i>kataṭ-t</i>	תִּכְתֹּבִי <i>ti-xtəv-i</i>	כִּתְּבִי <i>kitv-i</i>	לְכַתּוֹב <i>lixtov</i>	'write'
נפעל <i>nif'al</i>	נִכְתֵּבֶת <i>nixtev-et</i>	נִכְתַּבְתְּ <i>nixṭav-t</i>	תִּכְתְּבִי <i>ti-katəv-i</i>	הִכְתְּבִי <i>hikatəv-i</i>	לְהִכְתֹּב <i>lehikatev</i>	'be written'
פעל <i>pi'el</i>	מְכַתֵּבֶת <i>mexatev-et</i>	כָּתַבְתְּ <i>katav-t</i>	תִּכְתְּבִי <i>te-xatəv-i</i>	כְּתִבִי <i>katəv-i</i>	לְכַתֵּב <i>lexatev</i>	'address'
הפעיל <i>hif'il</i>	מְכַתִּיבָה <i>maxtiv-a</i>	הִכְתַּבְתְּ <i>hixṭav-t</i>	תִּכְתְּבִי <i>ta-xtiv-i</i>	הִכְתְּבִי <i>haxtiv-i</i>	לְהִכְתִּיב <i>lehaxtiv</i>	'dictate'
התפעל <i>hitpa'el</i>	מִתְכַתֵּבֶת <i>mitkatev-et</i>	הִתְכַתַּבְתְּ <i>hitkatav-t</i>	תִּתְכַתְּבִי <i>ti-tkatəv-i</i>	הִתְכַתְּבִי <i>hitkatəv-i</i>	לְהִתְכַתֵּב <i>lehitkatev</i>	'correspond'

(5) את היית כותבת מכתבי תלונה בכל הזדמנות

'at	hayi-t	kotev-et	mixteve	tluna
you.FS.	BE.PAST-2FS.	write.PTCP-FS.	letters.GEN	complaint
be-xol	bizdamnut			
in-every	occasion			

'You would/used to write complaint letters on every occasion'.

(6) הוסכם אפוא שנעמן ייסע לירושלים, אל בית-הספר למוסיקה, ויהיה שב הביתה לחג הפסח ...

huskam	'efo	še-na'aman	y-isa'	
agree.PASSIVE.PAST.3MS.	then	that-Na'aman	3-travel.FUT.MS.	
li-yrušalayim,	'el	bet-basefer	le-muziqa,	
to-Jerusalem,	to	the.school	for-music	
ve-y-ihye	šav	habayta	le-xag	ha-pesax
and-3-BE.FUT.MS.	return.PTCP.MS.	home	for-holiday	the-Pessah

'It was agreed then that Na'aman would go to Jerusalem, to the music school, and that he would come home for Pessah holiday ...'

(Tsvioni 1993:62)

- (7a) הילדות היו / *יהיו רוקדות במעגל
*ha-yelad-ot hay-u / *yibiy-u roqd-ot be-ma'agal*
 The-girl-FPL. BE.PAST-CPL. / 3.BE.FUT-CPL. **dance PTCP-FPL.** in-circle
 'The girls used to dance / *will (habitually) dance in a circle'.
- (7b) הילדות היו / יהיו רוזות
ha-yelad-ot hay-u / yibiy-u raz-ot
 The-girl-FPL. BE.PAST-CPL. / 3.BE.FUT-CPL. **thin-FPL.**
 'The girls were / will be thin.'
- (8a) ראיתי ילדות שרוקדות / הרוקדות במעגל
ra'i-ti yelad-ot še-roqd-ot / ha-roqd-ot
 saw-1CS. girl-FPL. that-dance.PTCP-FPL. / EMPH-dance.PTCP-FPL.
 'I saw girls that were dancing / girls (that were) dancing'.
- (8b) *ראיתי ילדות שרוזות / הרוזות
**ra'i-ti yelad-ot še-raz-ot / ha-raz-ot*
 saw-1CS. girl-FPL. that-**thin-FPL.** / EMPH-**thin-FPL.**
 intended: 'I saw girls that were skinny'.
- (9a) במכתבי התלונה טיפלה / טתפל טלי
be-mixteve ha-tluna tipl-a / te-ṭapel ṭali
 in-letters.GEN the-complaint handle.PAST-3FS. / 3FS.-handle.FUT Tali
 'The complaint letters Tali handled/will handle'.
- (9b) במכתבי התלונה מטפלת טלי
be-mixteve ha-tluna meṭapel-et ṭali
 in-letters.GEN the-complaint handle.PTCP-3FS. Tali
 'The complaint letters Tali handles'.
- (9c) במכתבי התלונה מעוניינת טלי^{22/*}
**²²be-mixteve ha-tluna me'unyen-et ṭali*
 in-letters.GEN the-complaint interested-FS. Tali
 Intended: 'In the complaint letters Tali is interested'.

Second, the participle/present tense form may be preceded by either subordinating conjunction *-ש* *še-* 'that' or the emphatic-state form *-ה* *ha-*, in relative clauses (→ Participle), while an adjective cannot (8).

Third, in the environment of triggered inversion (Doron and Shlonsky 1991), where the subject follows the verb in the presence of a dislocated phrase at the beginning of the clause, the present tense form patterns like the other two inflected verbal forms, and not like adjectival predicates, which do not appear before the subject (9).

These syntactic environments indicate that the present tense form is indeed verbal, and that it has double duty: as participle and as the present tense form. Modern Hebrew then has a verb system consisting of three tensed forms: the past, the present, and the future (Rosén 1977; Doron 2006). The next section reviews the semantic meanings associated with the three forms.

3. THE TEMPORAL MEANINGS RELATED TO THE TENSE FORMS

There is no one-to-one correspondence between form and meaning. Each of the three finite forms: present, past, and future is associated with several temporal meaning in their various contexts of use. This section lists these temporal readings (→ Mood and Modality; Imperative and Prohibitive; Infinitive).

3.1 Present tense form

This form is mainly used to express the Present tense, where the speech time overlaps with the reference time (S = R). This is exemplified in (10). Note in (10a) the adverb *עכשיו* *axšav* 'now' specifies the temporal reference which is the Present.

The present tense form may also be used to express habits holding at speech time (11). The habit started before the speech time and poten-

tially stretches well after it. With the habitual reading, it is not the actual walking to school or playing poker that go on at the speech time, but the habit that underlies these events.

Additionally, the present tense form may encode the Future. This is evident by the availability of Future oriented modification, e.g., the adverb מחר *maḥar* ‘tomorrow’, (12).

The Future reading is attested with a wide variety of verbs, not only motion verbs (12a). This reading is dependent on such factors as control and intentionality exercised by the agent over the action, predictability, and the

availability of a plan. For instance, stative predicates in the present tense form do not easily support a Future reading, as they do not involve intentional agents or programmable properties.

The Modern Hebrew present tense form is also associated with Present Perfect readings. These are triggered in the presence of adverbs such as כבר *kvar* ‘already’ and מזה *mize* or מאז *me’az* -ש *me’az še-* ‘since’ introducing the exact measure of the time period relevant for the perfect interpretation (→ Temporal Clause; Adverb; Adverbial, Aspect).

- (10a) טלי אוכלת עכשיו צהרים
ṭali *’oxel-et* *’axšav* *šohorayim*
 Tali eat.PTCP-FS. now noon(meal)
 ‘Tali is eating lunch now’.
- (10b) האוכל מוצא חן בעיניה
ha-’oxel *moše* *ḥen* *be-’eyne-ha*
 the-food find.PTCP.MS. favor in-eyes-her
 ‘She likes the food’.
- (11a) טלי הולכת לבית-הספר ברגל
ṭali *holex-et* *le-vet-ha-sefer* *ba-regel*
 Tali go.PTCP-FS. to-school in-foot
 ‘Tali goes to school on foot’.
- (11b) אחותי משחקת פוקר
’axot-i *mesaxeq-et* *poqer*
 Sister-my play.PTCP-FS. poker
 ‘My sister plays poker’.
- (12a) אני נוסעת מחר לירושלים
’ani *nosa’-at* *maḥar* *li-yrušalayim*
 I travel.PTCP-FS. tomorrow to-Jerusalem
 ‘I am going to Jerusalem tomorrow’.
- (12b) טלי פוגשת מחר את נציגת החברה
ṭali *pogēš-et* *maḥar* *’et* *nešigat* *ha-ḥevra*
 Tali meet.PTCP-FS. tomorrow ACC representative.F.GEN the-company
 ‘Tali is meeting the company’s representative tomorrow’.
- (13a) טלי אוהבת מחר שוקולד
#ṭali *’ohēv-et* *maḥar* *šoqolad*
 Tali love.PTCP-FS. tomorrow chocolate
- (13b) הורי גרים מחר בירושלים
horay *gar-im* *maḥar* *bi-yrušalayim*
 parents.my live.PTCP-PL tomorrow in-Jerusalem
- (14a) הורי גרים בירושלים כבר שלושים שנה
horay *gar-im* *bi-yrušalayim* *kvar* *šlošim šana*
 parents.my live.PTCP-PL in-Jerusalem already thirty year
 ‘My parents have been living in Jerusalem for thirty years now’.
- (14b) טלי חולה מאז שחזרה מאיטליה
ṭali *ḥola* *me’az* *še-ḥazr-a* *me-’iṭalya*
 Tali sick.FS. since that-came.back.PAST-3FS. from-Italy
 ‘Tali has been sick since she came back from Italy’.

These examples express the universal present perfect (Iatridou et al. 2001). In these cases, the situation of living in Jerusalem (14a) or being sick (14b) occurs throughout a period which stretches from the speech time ‘backwards’, forming a period whose extent is specified by the adverbial expression (see section 5 in the entry on Aspect).

In all the contexts listed above, the present tense form encodes a notion of overlap between the speech time and the reference time. Additional components create the different readings.

Lastly, the present tense form encodes a historical present interpretation, this use occurs in specific environments. It is encountered mainly when narrating the life course of a person, for instance in a eulogy (15). The effect achieved by using the form in such a context is of situating the audience/addressee as a direct witness to the course of events, thus rendering the description more vividly.

The present tense form used instead of the past tense form may also be found in spoken language. Example (16) is adapted from Rosén (1977:195). Note that in this example the present tense form appears alongside a past adverbial *’etmol* ‘yesterday’. It seems, as also noted by Rosén, that in spoken language this

use of the present tense form is only possible with the 1st person. The effect it creates is similar to the one exemplified in (15): the addressee is more involved in what is happening. In this case the present tense form clearly does not encode the relation R = S. Nevertheless, it does encode an overlap relation between a reference time and a time corresponding to the perspective of the speaker/narrator.

It is important to note that the Present meaning is also available in the absence of the present tense form, namely in clauses featuring non-verbal predicates (→ Nominal Clause). These clauses are bare constructions featuring the subject and the predicate, but no overt tense marking. The copula appears in these clauses to indicate the Past or Future tense (7b).

Example (17a) illustrates a case where the predicate is a prepositional phrase. The presence of the adverb *’axšav* ‘now’ indicates the temporal anchoring to the speech time. In (17b) the predicate is an adjectival phrase. The adverbial expression *’kvar švu’ayim* ‘for two weeks (now)’ enables a Universal Present Perfect reading. Finally, the predicate in (17c) is a noun phrase. Here too, the property holding of the subject is true for a time span containing the speech time.

(15) כתברת השומר הצעיר, מודעת לעתיד יהודי פולין, היא עולה לארץ בשנת 1933. היא מגיעה לרמת-יוחנן

<i>ke-ḡavrat</i>	<i>ha-šomer</i>	<i>ha-ša’ir,</i>	<i>muda’-at</i>
as-member-GEN	the-Shomer	Ha-Tsa’ir,	aware-FS.
<i>le-’atid</i>	<i>yebude</i>	<i>polin,</i>	
to-future-GEN	Jews-GEN	Poland	
<i>hi</i>	<i>’ol-a</i>	<i>la-’areš</i>	<i>bi-šnat 1933.</i>
She	immigrate.PTCP-FS.	to-country	in-year 1933.
<i>hi</i>	<i>magi’-a</i>	<i>le-ramat yoḡanan</i>	
she	arrive.PTCP-FS.	to-Ramat Yohanan	

‘As a member of HaShomer HaTsa’ir, aware of what awaits the Jews of Poland, she immigrates to Israel in 1933. She arrives at Ramat Yochanan’.

(16) אתמול אני מטיילת ברחוב, ואת מי אני פוגשת?

<i>’etmol</i>	<i>’ani</i>	<i>meṭayel-et</i>	<i>ba-reḡov,</i>
Yesterday	I	walk.PTCP-FS.	in-the-street,
<i>ve-’et</i>	<i>mi</i>	<i>’ani</i>	<i>pogeš-et?</i>
and-ACC	who	I	meet.PTCP-FS.

‘Yesterday I’m walking on the street, and whom do I meet?’

(17a) טלי בבית עכשיו

<i>ṭali</i>	<i>ba-bayit</i>	<i>’axšav</i>
Tali	in.the-house	now

‘Tali is at home now’.

(17b) טלי חולה כבר שבועיים
ṭali xola kvar švu'ayim
 Tali sick.FS. already week.DUAL
 'Tali has been sick for two weeks'.

(17c) טלי עורכת-דין
ṭali 'orexet-din
 Tali lawyer
 'Tali is a lawyer'.

3.2 Past tense form

The past tense form encodes a precedence relation between R and S ($R < S$). The underlying event may be episodic, as in (18), or habitual, as in (19). In both (18a) and (19a), the temporal adverbial expressions specify R and indicate, in concordance with the verbal morphology, that it is anterior to the speech time. Importantly, verbal morphology does not encode any indication about the relation between E and S. This is most clearly seen in (18b), where the feeling of liking the food may very well be understood as overlapping the speech time. Again, what the verbal morphology expresses is that the habit

held during a time, R, is anterior to the speech time, S.

Additionally, the past tense form is used together with appropriate adverbs to express the perfect; either the existential reading of the present perfect (Iatridou et al. 2001) or the past perfect. Examples for the former are given in (20) (see also section 5 in the entry on Aspect).

In these examples, like in the ones in (14), the underlying event is situated along a time span stretching from a point in the past until the speech time. In (20a) the underlying event of visiting the museum has occurred at least once during that time span. In (20b), the underlying event occurred twice during the relevant time span, starting on the first day of employment in the relevant situation. That the time span involved in the semantics of the perfect includes the speech time in both (14) and (20), exemplifying respectively the universal and existential perfect readings, enables the 'Current Relevance' effect attributed to the perfect (Jespersen 1924; Dowty 1979).

(18a) טלי אכלה אתמול צהרים עם דנה
ṭali 'axl-a 'etmol šohorayim 'im dana
 Tali eat.PAST-3FS. yesterday noon(meal) with Dana
 'Tali ate lunch with Dana yesterday'.

(18b) האוכל מצא חן בעיניה
ha-'oxel maša xen be-'ene-ha
 the-food find.PAST.3MS. grace in-eyes-3FS.
 'She liked the food'.

(19a) בילדותה, טלי הלכה לבית-הספר ברגל
be-yaldut-a(h), ṭali halx-a le-vet.ha.sefer ba-regel
 In-childhood-her Tali go.PAST-3FS. to-school in-foot
 'In her childhood, Tali went to school on foot'.

(19b) אחותי שיחקה פוקר
'axot-i siḡq-a poqer
 Sister-my play.PAST-3FS. poker
 'My sister played poker'.

(20a) טלי (כבר) ביקרה במוזיאון הזה בעבר
ṭali (kvar) biqr-a ba-muze'on ha-ze be-'avar
 Tali (already) visit.PAST-3FS. in.the-museum the-this in-past
 'Tali has (already) visited this museum in the past'.

(20b) אחותי פגשה את נציגת החברה פעמיים מאז החלה לעבוד כאן
'axot-i paḡš-a 'et nešigat ha-xevra
 Sister-my meet.PAST-3FS. ACC representative.F.GEN the-company
pa'amayim me-'az hexel-a la'avod kan
 twice from-then start.PAST-3FS. to.word here
 'My sister has met with the company's representative twice since she started working here'.

Example (21) illustrates a case where the past tense form expresses a Past in the Past, similarly to a pluperfect/past perfect. The event described by the main verb in the examples, הגיעה *higi'a*, is anterior to the other event in the example, which itself is Past.


Lacking explicit aspectual marking, the past tense form may express 'ongoingness' as well as termination of the underlying event (→ Aspect). The choice between the two readings depends on context, but also on the type of event the VP denotes. VPs denoting dynamic events have a default perfective interpretation, whereas VPs denoting states have a default imperfective interpretation (22) (Boneh and Doron 2008).

Finally, in a spoken register, the past tense form may be used when no actual anteriority is involved. It is viewed by the speaker as already performed (Schwarzwald 1994:84, 108–115). In example (23a), B's answer emotively confirms A's proposal, the choice of verb form does not situate the time of going prior to the refer-

ence time or the speech time. Similarly, example (23b) does not convey a situation in which the speaker once liked what she now sees on display, rather the use of the past tense form to express a current feeling creates an effect where the speaker's feeling is forcefully expressed. In this use, the past tense form, like the historical present mentioned above, indicates anchoring to the speaker's perspective point, and not to the speech time.

For past tense forms in conditional clauses see the entry on Mood and Modality (→ Mood and Modality).

3.3 Future tense from

The future tense form is mainly associated with the expression of mood and modality (→ Mood and Modality). Glinert (1989) mentions two modal uses of the future tense form: in the context of requests (24) and in indicating low frequency regularities (25) 

- (21) כשדנה יצאה מהמשרד, טלי כבר הגיעה הביתה
kše-dana yaš'a me-ha-misrad,
 when-Dana come.out.PAST-3FS. from-the-office,
ṭali kvar higi'a ha.bayta
 Tali already reach.PAST.3FS. home
 'When Dana left the office, Tali had already arrived home'.
- (22) כשנכנסתי לחדר, הוא אכל סנדוויץ'
kše-nixnas-ti la-xeder, hu 'axal sendvič
 when-enter.PAST-1CS. to.the-room, he ate.PAST.3MS. sandwich
 i. 'When I entered the room, he was eating a sandwich'.
 ii. 'When I entered the room, he ate a sandwich'.
- (23a) A: אז הולכים? B: הלכנו!
'az holx-im? halax-nu?
 then go.PTCP-PL go.PAST-1PL.
 'So are we going?' 'We're gone/We're out of here'.
- (23b) (said while looking at a display while window shopping)
 אהבתי!
'ahav-ti
 love.PAST-1CS.
 'I like it very much!'
- (24) אבקש לדבר בשקט
'a-vaqeš ledaber be-šeqeṭ
 I-ask.FUT.MS to.speak in-silence
 'I would ask you to speak in a low voice'.

- (25a) אנחנו לא חברים טובים. לפעמים אני אגיד לו שלום אבל זה הכל
 'anaxnu lo xaver-im tov-im
 we not friend.PL good.PL.M
 lif'amim 'ani 'a-gid lo šalom
 sometimes I I-say.FUT.CS. to.him hello
 'aval ze ha-kol
 but this the-all
 'We are not good friends. Sometimes I'll say hello to him but that's all'. (Glinert 1989: 137)
- (25b) טלי לא תעשה כזה דבר
 tali lo ta'ase ka-ze davar
 Tali not 2-do.FUT.FS. such thing
 'Tali would not do such a thing'.

However, the future tense form does also have temporal uses, namely expressing a relation of subsequence between R and S: R > S.

- (26) טלי תאכל מחר צהרים עם דנה
 tali t-oxal maxar sohorayim 'im dana
 Tali 3-eat.FUT.FS. tomorrow noon(meal) with Dana
 'Tali will eat lunch with Dana tomorrow'.
- (27) אחותי תשחק פוקר
 'axot-i te-saxeq poqer
 Sister-my 3-play.PAST.FS. poker
 'My sister will play poker'.

Example (26) describes an episodic event that will occur in the Future with respect to the speech time, the adverbial expression specifying the reference time. Example (27), in the absence of adverbial expressions, may describe, depending on context, either an episodic reading, or a habitual reading, both subsequent to the speech time.

In section 3.1 it was shown that the present tense form may be used to refer to Future time in some cases (see examples (12)–(13)). Authors such as Glinert (1989) and Kutscher (1982:257–259) have noted that the present tense form expresses a temporal Future, whereas the future tense form is essentially modal. However, the present tense form is blocked from expressing the Future with a stative VP, whereas the future tense form is not. Also, the present tense form cannot express Future habituais (28), which the future tense form can (29).

- (28) #היא משחקת פוקר
 #hi mesaxeq-et poqer
 she play.PTCP-FS. poker
 Intended: 'She is going to play poker/she will be playing poker'.

With the present tense form, there is a much more colloquial feel to the sentence, and it begs the spelling-out of an appropriate environment, such as:

- (29) כשהיא תהיה גדולה, בליינד היא משחקת פוקר
 kše-hi t-ihye gdol-a, big-FS.,
 When-she 3-BE.FUT.FS. big-FS.,
 blaynd hi mesaxeq-et poqer
 no-doubt she play.PTCP-FS. poker
 'When she grows up, no doubt she's going to play poker'.

According to Kutscher (1982:258) it also expresses habitual; see examples there.

For future tense forms in conditional clauses see the discussion on Mood and Modality (→ Mood and Modality).

3.4 Tense in subordinate clauses: Sequence of Tense phenomena

Modern Hebrew tenses maintain their main temporal use in subordinate clauses. Particularly, the past tense form always encodes a precedence ordering of the reference time of

the subordinate clause in relation to the reference time of the main clause. In order to obtain a simultaneous reading in the past, the present tense form must be used (Sharvit 2008).

(30a) presents a case of a shifted reading, the time of loving chocolate is past-shifted with respect to the time of speaking, in the main clause. In (30b) it is interpreted as being simultaneous with speech time (not with the time of the main verb).

The translation of these examples into English presents a different picture. Embedding a (stative) past verb under a past attitude verb gives rise to an ambiguity: the time of the embedded clause can be either simultaneous or past shifted with respect to the time of the attitude verb in the matrix (the intended reading for each of the examples above is indicated in small caps beside the translation line). In English, since an embedded past tense makes available a simultaneous reading, the present tense is not required for this matter. Embedding a present tense under a past attitude verb results in a Double Access reading (Abusch 1997). In (31) the state of being pregnant is understood to concern both a point in the past and the speech time, it covers a period stretching between the two (hence the term Double Access). In Hebrew, where the past tense form is only used for past shifted readings and the present tense form is responsible for the simultaneous readings, a Double Access reading is

not distinguished morpho-syntactically, as it is in English (Sharvit 2008).

The generalization for Modern Hebrew is then the following: a past tense verb, embedded under a past main verb, always expresses a precedence relation (a shifted reading); a present tense verb, embedded under a past main verb, always expresses a simultaneous reading. The generalization also holds, with a minor difference, when embedding the past and present tense forms in a relative clause. The past form expresses a precedence relation and the present tense a simultaneous one, albeit with respect to the speech time.

In example (32a) the past tense of the embedded relative clause indicates that the time of the man sitting outside is prior to the speech time, and it can also be interpreted as prior to the time of Tali running into him, i.e., to the time of the main verb. Example (32b), with a present tense form in the embedded relative clause, can only be understood as simultaneous to the speech time. It cannot however be interpreted as simultaneous to the time of the main verb.

Lastly, the future tense verb also conforms to the generalization outlined above; it is a mirror image of the past tense verb: it provides a future shifted reading with respect to the embedding attitude verb (33), and a future shifted reading with respect to the speech time, when embedded in a relative clause (34).

- (30a) טלי אמרה שדנה אהבה שוקולד
ṭali *'amr-a* *še-dana* *'ahav-a* *šoqolad*
 Tali say.PAST-3FS. that-Dana love.PAST-3FS. chocolate
 'Tali said that Dana (had) loved chocolate'.
 LOVE < SAY
- (30b) טלי אמרה שדנה אוהבת שוקולד
ṭali *'amr-a* *še-dana* *'ohev-et* *šoqolad*
 Tali say.PAST-3FS. that-Dana love.PTCP-FS. chocolate
 'Tali said that Dana loved/loves chocolate'.
 LOVE = SAY
- (31) Mary said that Beth is pregnant.
- (32a) טלי נתקלה באיש שישב בחוץ
ṭali *nitqel-a* *ba-ʾiš* *še-yašav* *baxuṣ*
 Tali run.into.PAST-3FS. in.the-man that-sit.PAST.3MS. outside
 'Tali ran into the man that sat outside'.
- (32b) טלי נתקלה באיש שיושב בחוץ
ṭali *nitqel-a* *ba-ʾiš* *še-yošev* *baxuṣ*
 Tali run.into.PAST-3FS. in.the-man that-sit.PTCP.MS. outside
 'Tali ran into the man that is sitting outside now'.

(33) said on January 5th:

היא הודיעה שתגיש את העבודה עד שניים בינואר
hi hodi'-a še-t-agiš 'et ha-'avoda
 She announce.PAST-3FS. that-3-hand.in.FUT.FS. ACC the-paper
'ad šnayim be-yanu'ar
 until two in January

'She announced that she would hand in the paper by January 2nd'.

(34) הוא נתקל באישה שתעמוד בראש החברה

hu nitqal ba-'iša še-ta-'amod
 he run.into.PAST.3MS. in.the-woman that-3-stand.FUT.FS.
be-roš ha-ḥevra
 in-head.GEN the-company

'He ran into the woman that will head the company'.

3.5 Summary

Despite the variety of uses exemplified for the three tensed forms, a unique temporal relation is encoded by each. The present tense form encodes simultaneity or overlap, principally between the speech time and the reference time. In narratives, it may encode an overlap relation between the reference time and a perspective point relevant for the narration. This perspective point may be disjointed from the speech time. This is presumably the case with the Historical Present reading. The past tense form encodes a precedence relation between R and S: R precedes S and is disjointed from it. The future tense form, in its temporal uses, encodes a subsequence relation between S and R: R follows S and is disjointed from it. These exact temporal relations are also attested in embedded environments. The syntactic type of embedding (complement clause versus relative clause) determines whether the three temporal relations (overlap, precedence, and subsequence) involve the reference time of the embedding verb or the speech time (cf. Hatav 2010).

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