

Mood and Modality (Modern Hebrew)

The category of Mood, like that of Modality, is related to the distinction between actual, i.e., real or factual, states of affairs and those which are not actual. From a general cross-linguistic perspective, Mood is sometimes taken to be a subtype of Modality, and is more readily associated with morphological inflection on the verb (Palmer 2001).

I. MOOD

In Modern Hebrew, four types of mood (Hebrew דרך *derex*) can be distinguished, mainly on syntactic grounds: the INDICATIVE, the IMPERATIVE, the OPTATIVE/SUBJUNCTIVE (volitive), and the CONDITIONAL moods (→ Verbal system; Imperative; Optative Expressions; Conditional Clause). The first three are known in traditional Hebrew grammatical terminology as דרך החיווי *derex ha-xivuy*, דרך הצייווי *derex ha-šivuy*, דרך האיווי *derex ha-ivuy*, respectively.

The indicative

The indicative mood, which is the one linked with asserting facts, is unmarked. The verbal forms used to express this mood are surveyed in the entry on tense.

The imperative

The imperative mood is used mainly for expressing orders, commands, requests, and instructions. Clauses containing imperatives generally involve a covert subject related to the addressee. These clauses cannot be embedded. In colloquial registers it is generally the future form (i.e., *yiqtol*) that serves to express the imperative mood, with only a few verbs maintaining their imperative form, e.g., קום *qum* 'stand up', שב *šev* 'sit', בוא *bo* 'come', לך *lex* 'go', סע *sa* 'drive off'. More formal registers tend to use the imperative form, though official orders and instructions often employ the infinitive. Irrespective of register, the imperative mood is characterized by a distinct way of marking negation: the particle אל *'al* is used with the future tense form of the verb. In the

following example, (1a) illustrates negation of the imperative mood, whereas (1b) illustrates future tense negation of the indicative mood.

- (1a) אל תבוא
'*al ta-vo*
NEG_{MOD} 2MS.-come.FUT
'Don't come!'
- (1b) לא תבוא
'*lo ta-vo*
NEG 2MS.-come.FUT
'You won't come.'

See the following examples of infinitival forms used to express the imperative mood in a similar manner to the imperative form; (2a) expresses a command, (2b) an instruction. Unlike the negative command expressed by אל *'al* 'not' + future, the infinitive is negated by the negative form לא *lo* 'not':

- (2a) לקום!
laqum
to.stand up
'Stand up!'
- (2b) לנער לפני שימוש
lena'er lifney šimuš
to.shake before use
'Shake before use.'

The optative/subjunctive

The optative/subjunctive mood, conveying volitivity, is manifested syntactically and not morphologically. In an older (and now more formal) register of Modern Hebrew, Rosén (1977) notes verb-subject inversion with a future tense verb as conveying volitivity (examples 3–4 are from Rosén 1977:231). (3a) is a simple indicative sentence expressing a statement about a state of affairs in the future, whereas (3b) expresses a wish:

- (3a) יוסף יבורך על מעשיו
yosef ye-vorax 'al ma'as-av
Yosef 3MS.-be.blessed.FUT on deeds-3MS.
'Yosef will be blessed for his deeds'.

- (3b) יבורך יוסף על מעשיו
ye-vorax yosef 'al ma'as-av
 3MS.-be.blessed.FUT Yosef on deeds-3MS.
 'May Yosef be blessed for his deeds'.
- (4a) יוסף לא יבורך על מעשיו
 Yosef lo ye-vorax 'al ma'as-av
 Yosef NEG 3MS.-be.blessed.FUT on deeds-3MS.
 'Yosef will not be blessed for his deeds'.
- (4b) אל יבורך יוסף על מעשיו
 'al ye-vorax yosef 'al ma'as-av
 NEG_{MOD} 3MS.-be.bless.FUT Yosef on deed-3MS.
 'May Yosef not be blessed for his deeds'.
- (5a) שיוסף יבורך על מעשיו
še-yosef ye-vorax 'al ma'as-av
 that-Yosef 3MS.-be.blessed.FUT on deeds-3MS.
 'May Yosef be blessed for his deeds'.
- (5b) שתחזור בשלום
še-ta-ḡazor be-šalom
 that-3FS.-come.FUT in-peace
 'May she return safely'.
- (5c) שתהיה לי בריא
še-ti-hiye li bari'
 that-2MS.-be.FUT to.me healthy.MS.
 'Keep up the good health'.
- (6) הלוואי שתחזור בשלום
halevay še-ta-ḡazor be-šalom
 Let it be that-3SG.F-come.FUT in-peace
 'I wish she would return safely'.
- (7) הלוואי שהיא חזרה בשלום
halevay še-hi ḡazra be-šalom
 Let it be that-she come.PAST-3FS. in-peace
 'I hope she came back safely'.

Rosén indicates that the two different syntactic patterns can be detected by the use of negation. (4a) is negated with the negative particle **לא** *lo* while (4b) is negated using the particle **אל** *'al*.

In the modern standard register, the subjunctive mood is marked, as in the examples in (5), with the subordinating particle **-ש** *še-* 'that' introducing a main clause.

In the presence of the subordinating particle (5), word order is not a determining factor for mood interpretation as it is in the older example (3b).

The examples in (5) are reminiscent of the complements to the invariant expression *halevay* הלוואי, roughly translatable as 'let it be, (I) wish, if only'.

However, it is unlikely that there is a silent *halevay* הלוואי before sentences such as in (5) since *halevay* הלוואי does not pose restric-

tions on the tense of the verb in the clause it selects, whereas those exemplified in (5) can only appear with the future tense form of the verb. In example (7), the speaker expresses a wish about a state of affairs which is supposed to hold prior to the utterance time, the outcome of which is not certain from the speaker's point of view.

The sentences in example (5) share properties with clausal complements embedded by a group of verbs related to the speech acts of ordering, demanding, suggesting, such as *להמליץ* *lehamliš* 'recommend', *להציע* *lehašia'* 'propose', *לצוות* *lešavot* 'order', *להזהיר* *lehazhir* 'warn', *לדרוש* *lidroš* 'demand', *לשדל* *lešadel* 'urge'. In languages with a distinct subjunctive morphological inflection, these verbs select for the subjunctive mood. Landau (2004) identifies three syntactic properties suggesting that clauses

embedded under these verbs form a subjunctive-like natural class (examples (8)–(10) below are adapted from Landau 2004:816–821).

First, the embedded clause may only feature the future tense verb form.

Second, when the embedded verb is inflected for third person, no overt (pro)nominal subject is required, contrary to the general pattern in plain clauses containing a future tense verb (9) (→ Pro-drop).

Sentence (9b) also contrasts with (5) above, where no overt (pro)noun is required.

Finally, these constructions behave syntactically as a single clause with respect to Negative Concord Items (words or expressions that require the presence of clause-mate negation (→ Negation), similar to embedded clauses with a subjunctive verb in languages with overt subjunctive morphology (Progovac 1993).

In this syntactic environment, negation can license the negative concord item *af* 'if

'anybody' across the subordinating particle *-š* *še-* 'that' in (10a), but not in (10b). (10b) features a different type of matrix verb which does not impose any selectional restrictions of the type enumerated above on the verb in the embedded clause.

The conditional

Conditional mood is expressed in Hebrew by combinations of the three tense forms and dedicated subordinating particles: *am* 'if', *(i)lu* a slightly archaic subordinator for the counterfactual conditional, and *(i)lule*, *'ilmale*, which are forms for negative counterfactual conditions.

Conditional clauses are of two semantic sorts: potential / hypothetical and counterfactual. (11)–(12) exemplifies the first group, (13)–(14) the second.

- (8a) רינה המליצה לי שאנעל את הדלת
rina himliša li še-²e-n'al 'et ha-delet
 Rina recommend.PAST.3FS. to.me that-1CS.-close.FUT ACC the-door
 'Rina recommended to me that I close the door'.
- (8b) רינה המליצה לי שנעלתי את הדלת*
 **rina himliša li še-na'al-ti 'et ha-delet*
 Rina recommend.PAST.3FS. to.me that-close.PAST-1CS. ACC the-door
 *'Rina recommended to me that I closed the door'.
- (9a) רינה המליצה לגיל שיעבוד יותר קשה
rina himliša le-gil še-ya'avod yoter qaše
 Rina recommend.PAST.3FS. to-Gil that-3MS-work.FUT more hard
 'Rina recommended to Gil that he work harder'.
- (9b) יעבוד יותר קשה*
 **ya'avod yoter qaše*
 3MS.-work.FUT more hard
 Intended: 'He will work harder'.
- (10a) גיל לא דרש ממני שאדבר עם אף אחד
gil lo daraš mimeni še-a-daber 'im 'af 'exad
 Gil not demand.PAST.3MS. of.me that-1CS.-talk.FUT with anybody
 'Gil did not demand of me that I speak to anybody'.
- (10b) גיל לא האמין שאדבר עם אף אחד*
 **gil lo he'emin še-a-daber 'im 'af 'exad*
 Gil not believe.PAST.3MS. that-1CS.-talk.FUT with anybody
 *'Gil did not believe that I would talk with anybody'.
- (11a) אם תלי מגיעה, תודיע לי
'im tali magi'-a, to-di'a li
 If Tali arrive.PART-FS., 2MS.-notify.FUT to.me
 'If Tali arrives, let me know'.
- (11b) אם תלי מאחרת, היא מצלצלת
'im tali me'axer-et, hi mešalšel-et
 If Tali be.late.PART-FS., she call.PART-FS.
 'If Tali is late, she calls'.

- (11c) אם ירד גשם, הם לא יצאו
'im yarad gešem, hem lo yaš'u
 if fall.PAST.3MS. rain, they not go.out.PAST-3CPL.
 'If it rained, they didn't go out'.
- (11d) אם ירד גשם, הם לא יצאו
'im yarad gešem, hem lo y-eš'u
 if fall.down.PAST.3MS. rain, they not 3-go.out.FUT-CPL.
 'If it rained, they won't go out'.
- (12a) עמד התלמיד בכל הבחינות, יקבל את תעודתו
'amad ha-talimid be-xol ha-bxīnot,
 succeed.PAST.3MS. the-student in-all the-examinations
ye-qabel 'et te'udat-o
 3ms.-receive.FUT ACC diploma-3MS.
 'If the student passes all the examinations, he will receive his diploma' (Rosén 1977:234).
- (12b) שברת, שילמת
šavar-ta, šilam-ta
 break.PAST-2MS., pay.PAST-2MS.
 'If you break it, you must pay'.
- (12c) תייר מפריע לך בסיוור, את מסלקת אותו
tayar mafria(') l-ax ba-siyur
 tourist disturb.PART.MS. to-you.F in-the-tour,
'at mesaleq-et 'oto
 you.FS. expel.PART-FS. him
 'If a tourist disturbs you during the tour, you throw him out' (said as an instruction to a novice tour guide).
- (13a) אילו מכרה טלי את המניות אתמול, (היא) הייתה מרוויחה הון
'ilu maxr-a ṭali 'et ha-menayot 'etmol,
 If_{cf} sell.PAST-3FS. Tali ACC the-stocks yesterday,
(hi) hayt-a marviḡ-a hon
 (she) BE.PAST-3FS. gain.PART-FS. fortune
 'If Tali had sold the stocks yesterday, she would have made a fortune'.
- (13b) אם טלי הייתה מוכרת את המניות אתמול, היא הייתה מרוויחה הון
'im ṭali hayt-a moxer-et 'et ha-menayot 'etmol,
 if Tali BE.PAST-3FS. sell.PART-FS. ACC the-stocks yesterday,
hi hayt-a marviḡ-a hon
 she BE.PAST-3FS. gain.PART-FS. fortune
 'If Tali had sold the stocks yesterday, she would have made a fortune'.

In potential or hypothetical conditionals, the conditional particle אם *'im* 'if' opens the protasis. The verb forms appearing in the apodosis and the protasis preserve their temporal values.

Potential / hypothetical conditionals can also appear without a conditional particle, in a paratactic construction which has a rule-like flavor. In this context, the past tense verbal forms can be interpreted atemporally, not necessarily denoting a location in time preceding the utterance. (12a) is in a literary register, (12b)–(12c) are in a colloquial register.

Turning now to counterfactual conditionals, these present several distinct characteristics. First, as mentioned above, they use a dedicated conditional subordinating particle.

Second, there are restrictions on the temporal forms that may appear in the protasis and the apodosis: the latter uniformly features the periphrastic structure BE.PAST+participle, while the former features either the past tense form or the aforementioned periphrastic structure (→ Compound tenses). In the formal register, the past tense is used with the counterfactual particle, as in (13a). In more colloquial language like (13b) with the particle אם *'im*, only the periphrastic forms are possible.

These examples imply that Tali did not sell the stocks yesterday, and so the possibility of making a fortune as a consequence of selling them has ceased to be valid by the time of the utterance.

Importantly, the verbal forms here do not have a temporal denotation, as they are available with future oriented temporal adverbs, e.g., ‘tomorrow’ in the following examples.

(14) can be uttered in a context where the trip was planned to begin on the day of utterance time, but because of rain could not be carried out; the sentence conveys that rain on a day other than ‘today’ would not have altered the original plan. Another possible context for such a sentence is one in which the trip is meant to be a trip in the rain set out for ‘tomorrow’, and the weather forecast indicates no clouds in sight for the coming few days. For these cases it has been claimed that the past tense form relates to counterfactuality and not to a pure temporal denotation (Iatridou 2000).

2. MODALITY

Introduction

Modality is commonly conceived of as a semantic category having to do with such notions as

possibility, necessity, permission, obligation, ability, and desire, all having in common the property of expressing non-actual states of affairs. Less descriptively put, this category indicates whether the underlying proposition is possible or necessary given what is known to the speaker (EPISTEMIC modality), given a set of rules and principles (DEONTIC modality), given a set of circumstances (CIRCUMSTANTIAL modality), given a person’s desires (BOULETIC modality), or for achieving a particular goal (TELEOLOGICAL modality) (for more details on these notions and approach to modality see Kratzer 1991; Palmer 2001; von Stechow 2006; Portner 2009; Hacquard [forthcoming](#)).

Modality is expressed by a large variety of linguistic means: modal verbs or semi-verbs, adjectives, adverbs, nouns, derivational morphemes, and inflectional morphemes (similar to Mood). A partial list of modal items in Modern Hebrew, in addition to Mood, which was discussed above is provided in examples (15)–(18) (and see also Ambar 1989). This is not an

(14a) אילו ירד גשם מחר, היינו יוצאים לטיול בזמן

<i>'ilu</i>	<i>yarad</i>	<i>gešem</i>	<i>maḥar,</i>
If _{cf}	fall.PAST.3MS.	rain	tomorrow,
<i>hayi-nu</i>	<i>yoš'im</i>	<i>la-ṭiyul</i>	<i>ba-zman</i>
BE.PAST-1.CPL.	go.out.PART-MPL.	to-the-trip	on-time

‘If it rained tomorrow, we would have left for the trip on time’.

(14b) אם היה יורד גשם מחר, היינו יוצאים לטיול בזמן

<i>'im</i>	<i>haya</i>	<i>yored</i>	<i>gešem</i>	<i>maḥar,</i>
if	BE.PAST.3MS.	fall.PART.MS.	rain	tomorrow,
<i>hayi-nu</i>	<i>yoš'im</i>	<i>la-ṭiyul</i>	<i>ba-zman</i>	
BE.PAST-1.CPL.	go.out.PART-MPL.	to-the-trip	on-time	

‘If it rained tomorrow, we would have left for the trip on time’.

(15) Verbs or semi-verbs:

צריך *šarix* ‘need’, יכול *yaxol* ‘can’

(16) Adjectives

- a. general: חייב *ḥayav* ‘must’, אמור *'amur* ‘ought’, מוכרח *muxrax* ‘must’, עשוי *'asuy* ‘may/might’, עלול *'alul* ‘may/might (negative)’, אסור *'asur* ‘be forbidden’, מותר *mutar* ‘be permitted’, מסוגל *mesugal* ‘(cap)able’, צפוי *šafuy* ‘supposed to, likely’, רצוי *rašuy* ‘be preferable’, חשוב *ḥašuv* ‘important’, נחוץ *naḥuṣ* ‘necessary’, הכרחי *hexrexi* ‘necessary’, סביר *savir* ‘be plausible’, כדאי *keday* ‘be preferable/recommended’, אפשר *'ešsar* ‘be possible’
- b. the *qaṭil* derivational adjectival pattern: אכיל *'axil* ‘edible’, מדיד *madid* ‘measurable’, סחיר *saxir* ‘negotiable, marketable’

(17) Adverbs

אולי *'ulay* ‘maybe’, כנראה *kanir'e* ‘probably’, בטוח *baṭuaḥ* ‘certainly’, בהכרח *behexrax* ‘necessarily’

(18) Nouns

אפשרות *'ešsarut* ‘possibility’, יכולת *yexolet* ‘ability’, כרח *korax* ‘necessity’, חובה *ḥova* ‘duty’, מצווה *mišva* ‘commandment (religious)’, רשות *rešut* ‘permission’.

exhaustive list; many items in one group have a derivational counterpart in another group, for instance: אפשר *ʿefšar* (predicative adjective) ‘be possible’, אפשרות *ʿefšarut* (noun) ‘possibility’, אפשרי *ʿefšari* (predicative/attributive adjective) ‘possible’, איפשר *ʿifšer* (verb) ‘to make possible’, התאפשר *hitʿafšer* (verb) ‘to be (made) possible’. The variation in parts of speech indicates how rooted this category is in the grammar of language, but is not necessarily all that indicative as to its interpretative and grammatical nature. In the following subsections, the syntax and semantics of the lexical items listed in (15)–(18) will be considered in more detail, not necessarily following the classification into parts of speech.

Modal clausal predicates

Morphologically, most of the forms in (19) are participial—they inflect for number and gender. יכול *yaxol* ‘can’ and צריך *šarix* ‘need’ also inflect for past and future tense. יכול *yaxol* inflects regularly, but does not have an infinitival form; צריך *šarix* has suppletive past and future paradigms הצטרך *hištarex* ‘needed to’ and יצטרך *yištarex* ‘will need to’, respectively, and the infinitive להצטרך *lehištarex* ‘to need to’.

In the examples (20)–(21), given without a context, חייב *ḡayav* ‘must’ and יכול *yaxol* ‘can’ may be interpreted as either epistemic (i.e., possible or necessary given what is known to the speaker) or deontic (i.e., possible or necessary given a set of rules and principles).

Epistemic necessity or possibility are obtained if interpreted relative to a given piece of information, e.g., Tali’s car being parked in front of her house, or what the speaker knows about Tali’s schedule. In uttering (20), the speaker evaluates that, given the information at her disposal, there is no conceivable alternative to Tali’s being at home. (21) states that the underlying proposition is compatible with the available information. Deontic modality is obtained if interpreted relative to a relevant set of rules or principles; (20) is understood as expressing an obligation for Tali to be at home at a particular time, while (21) expresses permission.

The Circumstantial kind of modality is exemplified in (22). Given a set of relevant facts, such as the law of gravity, and local conditions, such as the lack of wind, etc., the proposition must (or can) be true.

חייב *ḡayav* ‘must’ and יכול *yaxol* ‘can’ can also be used to express Teleological modality, that is necessities/possibilities relative to a

- (19) צריך *šarix* ‘need’, יכול *yaxol* ‘can’, חייב *ḡayav* ‘must’, מוכרח *muxraḡ* ‘must’, אמור *ʿamur* ‘should/ought’, עשוי *ʿasuy* ‘may/might’, עלול *ʿalul* ‘may/might (negative)’, צפוי *šafuy* ‘supposed to’, מסוגל *mesugal* ‘(cap)able’, אסור *ʿasur* ‘be forbidden’, מותר *mutar* ‘be permitted’, סביר *savir* ‘be plausible’, חשוב *ḡašuv* ‘important’, רצוי *rašuy* ‘be preferable’, כדאי *keday* ‘be recommended’, אפשר *ʿefšar* ‘be possible’.

- (20) טלי חייבת להיות בבית בשעה כזאת
ṭali ḡayev-et libyot ba-bayit be-šaʿa ka-zot
 Tali must-FS. to.be in/the-house in-hour like-this
 ‘Tali must be home at such an hour’.

- (21) טלי יכולה להיות בבית בשעה כזאת
ṭali yexol-a libyot ba-bayit be-šaʿa ka-zot
 Tali can-FS. to.be in/the-house in-hour like-this
 ‘Tali can be home at such an hour’.

- (22) העלה שנשר מהעץ חייב/יכול לפגוע בקרקע
ha-ʿale še-našar me-ha-eš yaxol / ḡayav
 The-leaf that-fall.PAST.3MS. from-the-tree can.MS. / must.MS.
lifgoʿa ba-qarqa(ʿ)
 to.hit in.the-ground
 ‘The leaf that has fallen from the tree can/must hit the ground’.

given goal (23), and Bouletic modality, necessities/possibilities relative to one's desires (24).

אמור *'amur* 'should, be supposed to' is another predicate that can be used to express several kinds of modality. (25a) can be interpreted either as a (weak) necessity with respect to what is known to the speaker or a relevant set of rules or obligations. (25b) expresses Circumstantial modality.

This multiplicity of meanings is characteristic of modal predicates / auxiliaries cross-linguistically. Kratzer (1991) has suggested that it is not due to lexical ambiguity, but mainly to sensitivity to the context of use, and, in particular, to the nature of the alternative possibilities entertained in the context. Thus, the core semantic meaning of these predicates is either 'necessity' or 'possibility', and the various kinds of modality are mostly context-dependent. But other, non-lexical factors also come into play, for instance, Epistemic modality with the forms

in (20)–(21) arises only if the underlying proposition involves a stative VP (\rightarrow Stative); compare (26) which contains a non-stative VP to (20)–(21). (26) cannot be interpreted as an Epistemic modal stating that it is necessarily / possibly the case that Tali is winning. It must be interpreted either as a Deontic modal, stating that Tali has the obligation/permission to win, or as an Ability modal in the case of יכול *yaxol*. This particularity is not subject to the context of use.

Other modal predicates do not show this variety of modal meanings. For instance, מסוגל *mesugal* '(cap)able' expresses only Circumstantial modality (27). מותר *mutar* 'be permitted' and אסור *'asur* 'be forbidden' are only interpreted deontically (28). The bearer of permission/obligation in these construction is expressed via a prepositional phrase ל- *le-* 'to+NP', which may also remain implicit.

- (23) כדי להגיע בזמן, חייבים / יכולים לקחת מונית
kedey lehagia(') ba-zman, xayav-im / yaxol-im laqaxat monit
 In.order to.arrive on-time, must-CPL. / can-CPL. to.take taxi
 'To arrive on time, one must/can take a taxi'.
- (24a) אני ממש חייב לקנות את האייפון החדש
'ani mamaš xayav liqnot 'et ha-iPhone ha-xadaš
 I really must.MS. to.buy ACC the-iPhone the-new
 'I really must buy the new iPhone'.
- (24b) אני יכול לקנות את האייפון החדש
'ani yaxol liqnot 'et ha-iPhone ha-xadaš
 I can.MS. to.buy ACC the-iPhone the-new
 'I would be willing to buy the new iPhone'.
- (25a) טלי אמורה להיות בבית בשעה כזאת
ṭali 'amura lihyot ba-bayit be-ša'a ka-zot
 Tali should-FS. to.be in.the-house in-hour like-this
 'Tali should be home at such an hour'.
- (25b) הצמח הזה אמור לנבוט פה
ha-semax ha-ze 'amur linboṭ po
 The-plant the-this should.MS. to.sprout here
 'This plant should sprout here'.
- (26) טלי חייבת / יכולה לנצח
ṭali xayev-et / yaxol-a lenašex
 Tali must-FS. / can-FS. to.win
 'Tali must/can win'.
- (27) טלי מסוגלת לאחר לפגישה
ṭali mesugel-et le'aṣer la-pgiša
 Tali capable-FS. to.be-late to.the-meeting
 'Tali is capable of being late for the meeting'.
- (28) מותר / אסור לטלי להיות בבית בחמש
mutar / 'asur le-ṭali lihyot ba-bayit be-xameš
 permitted / forbidden to-Tali to.be in.the-house at-five
 'It is permitted / forbidden for Tali to be at home at five'.

Modal adverbs

Adverbs are used for stating Epistemic or Circumstantial modality (Livnat 1994; 1999). This is exemplified in (29)–(30).

Livnat (2002) claims that in Modern Hebrew *ʕulay* אולי ‘maybe’ has acquired a **deontic** modal interpretation. In the sentences in (31), אולי *ʕulay* ‘maybe’ can either downgrade or reinforce the speech act intended in the basic sentence. It seems that when the speech act is a request, אולי *ʕulay* downgrades it, and when the speech act is one of demanding, אולי *ʕulay* reinforces it (Livnat 2002). Nevertheless, it is important to note that this effect of אולי *ʕulay* is obtained only when the clause contains a future-tense verb form which has been shown to be associated with the expressions of commands, wishes, etc. (see above the sections on Imperative and Subjunctive mood). This may indicate that it is not the adverb that contributes the deontic flavor.

The qaṭil adjectival derivational pattern

Modern Hebrew has a pattern of adjectives expressing abilities and dispositions (possibility Circumstantial modals), *qaṭil*, cognate to the English adjectives suffixed with *-alible*. Both are derived from a transitive verbal form, and express possibilities related to a given verb’s theme (32). This pattern is quite productive and gives rise to numerous neologisms (33). The vast majority of these forms are based on verbs from *binyan qal* (but note קביל *qavil* ‘admissible (legally)’ from *piʿel* לקבל *leqabel* ‘receive’, mentioned by Rosén 1977:93).

A formation with a similar function available in Hebrew to supplement cases where an adjective cannot be derived from a verb using *qaṭil* is an adjectival compound consisting of the Aramaic noun *bar* + verbal-noun (→ Verbal noun; Rosén 1977:94, Gadish 2007).

- (29) טלי אולי/בטח/בהכרח בבית בשעה כזו
ṭali ʕulay / beṭax / be-hexraḥ ba-bayit be-šaʿa ka-zot
 Tali maybe / surely / necessarily in-the-house in-hour like-this
 ‘Tali (is) maybe/surely/ (is) necessarily home at such an hour’.
- (30) עץ שלא משקים אותו, בהכרח מתייבש
ʿeṣ še-lo mašq-im ʿoto, be-hexraḥ mityabeš
 Tree that-not water.PART.-MPL. it, necessarily dries.PART.MS.
 ‘A tree that is not watered, necessarily dries out’.
- (31a) אולי נשב
ʕulay ne-šev
 Maybe 1CPL-sit.FUT
 ‘Why don’t we sit/Let’s sit/Shall we sit’ (Livnat 2002, ex. 14).
- (31b) אולי תשאיר לי משהו
ʕulay ta-šʿiri li mašebu
 Maybe 2FS.-leave.FUT to.me something
 ‘Leave something for me, will you’ (Livnat 2002, ex. 13).
- (31c) אולי תעזוב אותי במנוחה
ʕulay ta-ʿazov ʿoti bi-mnuḥa
 Maybe 2FS.-leave.FUT me in-peace
 ‘Why don’t you leave me in peace!’ (Livnat 2002, ex. 18b).
- (32) אכיל *axil* ‘edible’, שביר *šavir* ‘breakable/fragile’, פתיר *patir* ‘solvable’,
 מסיס *masis* ‘soluble’
- (33) מכיר *maxir* ‘that which can be sold, sellable’, דהיר *dahir* ‘that which can be ridden,
 ridable’, e.g., a horse (Zarhi 2008)
- (34) בר-הגשמה *bar-hagšama* גשים* **gašim* ‘realizable’
 בר-השגה *bar-hasaga* השיג* **hasig* ‘obtainable’
 בר-ביצוע *bar-biṣuʿa* בציע* **bašiaʿ* ‘doable’
 בר-תיקון *bar-tiqun* תיקון# *#taqin* ‘reparable’
taqin תיקון is an existing form meaning ‘in order, proper, undamaged’.

- (35a) טלי נסעה / נוסעת / תיסע לעבודה באוטובוס
ṭali nas^ʿ-a / nosa^ʿ-at / ti-sa(ʿ) la-ʿavoda ba-ʾoṭobus
 Tali go.PAST-3FS. / **go-FS.** / 3FS.-go.FUT to-work by-bus
 ‘Tali went/goes/will go to work by bus’.
- (35b) טלי הייתה נוסעת לעבודה באוטובוס
ṭali hayt-a nosa^ʿ-at la-ʿavoda ba-ʾoṭobus
 Tali be.PAST-3FS. **go-FS.** to-work by-bus
 ‘Tali used to go to work by bus’.

The *qaṭil* adjectives have a dedicated negation morpheme בלתי *bilti*. *bar*+verb-noun is negated by לא *lo* (→ Negation of Adjectives).

Additional means to express modality

Habituality

Habituality is a modal concept: the habit is construed as a tendency to keep up a certain pattern (Krifka et al. 1995; Boneh and Doron 2009). In Hebrew all three verbal tenses can be part of habituality statements (35a). Habituality in the past may also be expressed by a dedicated periphrastic form, the past form of BE + participle, as exemplified in (35b) (→ Compound verb).

While the simple forms may also express episodic eventualities, the periphrastic form is used for the expression of habituality, unless used in conditional clauses, where it expresses counterfactual conditionals (See section 1 *The conditional*).

The interpretive differences between past tense habituality expressed by the simple past tense form, as in (35a), and by the periphrastic past as in (35b) are discussed in Boneh and Doron (2008; 2009).

Existential constructions involving modality

In a somewhat formal register of Modern Hebrew one finds the following for expressing Deontic modality:

- (36) עליך להיות פה בשש
ʿal-exa lihyot po be-šeš
 on-2MS. to.be here at-six
 ‘You must/should/are to be here at six’.

The bearer of the obligation is introduced by means of inflection of the preposition על *ʿal* ‘on’. Views diverge on whether this construction contains an elided form cognate to the noun חובה *ḥova* ‘duty’ or not (Rosén 1977 and Ambar 1989). However it does seem to

be the case that the source for modality has to be traced back to the presence of the infinitival form. Example (2) above on the Imperative mood, repeated here as (37), illustrates that the bare infinitive may also be used to express an obligation directed at the addressee.

- (37a) לקום
laqum
 to.stand up
 ‘Stand up!’
- (37b) לנער לפני השימוש
lenaʿer lifney šimuš
 to.shake before use
 ‘Shake before use’.

It is not the purpose of this entry to explore the affinity between Imperative mood and Deontic modality, but see for instance (Schwager 2006), who suggests that imperatives are performatives, but in any other respect are like Deontic necessity modals.

Additional support for the view that the source of Deontic modality is the infinitive comes from an older construction exemplified in (38):

- (38a) יש לאכול בפה סגור
yeš leʿexol be-fe sagur
 EXT.COP to.eat in-mouth shut
 ‘One should eat with one’s mouth shut’.
- (38b) יש להתקדם
yeš lehitqadem
 EXT.COP to.progress
 ‘One should progress’.

This construction is impersonal, and can appear only in the present tense (היה לאכול בפה סגור* **haya leʿexol be-fe sagur* ‘One should have eaten with one’s mouth shut’, if at all acceptable, is non-modal). Bhatt (1998) provides a cross-linguistic survey and analysis of possessive/existential constructions that also express Deontic modality. Although he argues that the source of modality is not the overt items in the

- (39) יש התקדמות
yeš hitqadmut
 EXT.COP progress
 'There's progress'.
- (40a) לנער לפני שימוש
lena'er lifney šimuš
 to.shake before use
 'Shake before use.'
- (40b) יש לנער לפני שימוש
yeš lena'er lifney šimuš
 EXT.COP to.shake before use
 'One should shake before use'.
- (41) אין/יש מצב שאחרי שלושה פגישות הוא זורק אותה
'eyn / yeš mašav še-ʾaḡarey šaloš pgišot hu zoreq ʾota
 NEG / EXT.COP situation that-after three meetings he dump.PART.MS. her
 'It is not / quite possible that after three dates he will dump her'.
- (42a) יש מצב שאנחנו נפגשים אחר-כך לקפה?
yeš mašav še-ʾanaḡnu nifgaš-im ʾaḡar kax le-qafe?
 EXT.COP situation that-we meet.PART-MPL. later to-coffee
 'Will it be possible that we meet later for coffee?'
- (42b) יש מצב להיפגש אחר-כך לקפה?
yeš mašav lehipageš ʾaḡar-kax le-qafe?
 EXT.COP situation to.meet later to-coffee
 'Will it be possible for us to meet later for coffee?'

construction, but rather a covert modal operator, considering the Hebrew example, it is not clear why a covert modal should be present in (38), but not in (39), which features the verbal noun, suggesting again that the infinitive is the source of modality.

Note also that bare infinitives, like the ones exemplified in (2) and (37) differ minimally from the existential-like constructions in (38) in that the order/obligation necessarily concerns the addressee in (37), but not in (38). The distinction is illustrated in (40).

Finally, in a colloquial register of Modern Hebrew there is an additional construction featuring the existential copula *יש/אין* *yeš/ʾeyn* 'there is/not' with *מצב* *mašav* 'situation' which is related to modality, since the combination means 'it is possible/ impossible' (41). This sentence is interpreted as a possibility (Epistemic) modal, uttered in view of available information. In the interrogative (42), this type of construction is used more and more to express attenuated proposals. Both sentences in (42) are actually equivalent to 'Would you like us to meet later for coffee?'

It seems that this construction is based on a calque of the English expression 'No way' which is *אין מצב* *'eyn mašav* in Modern Hebrew. Con-

structions such as (41)–(42) exhibit a modal flavor of possibility, contrasting with the necessity Deontic modality of the construction exemplified in (38).

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