

Chapter 1

Apprehension in Hebrew

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This paper describes the main constructions that give rise to apprehensional meaning in Hebrew. These include a modal complementizer and a modal adjective that encode apprehension conventionally, a temporal additive that gives rise to apprehensive readings pragmatically in particular contexts, and, potentially, a complex complementizer formed with negation. Apprehension in Hebrew is situated within the broader context of apprehensive marking across languages, preliminary remarks are made about diachronic changes, and the outline of an analysis is proposed.

1 Introduction

This paper provides a description, and sketches an analysis of, the main constructions that give rise to apprehensional meaning in Hebrew, with the aim of contributing both to the understanding of apprehension as an interpretation category and to the description and analysis of Hebrew grammar.

Biblical Hebrew has an apprehensive marker *pen* ‘lest’ that occurs at the left periphery of a clause and, intuitively speaking, conveys that the eventuality described by the clause it marks is possible and undesirable from the perspective of the speaker, as well as, potentially, others (the listener, or individuals mentioned in the clause). This marker was lost in the later stage of the language known as Mishnaic Hebrew (roughly, 70BC to 400CE, see e.g. Bar Asher (1999), was brought back to usage during the revival period, but fell out of use again in the modern language, where it survives today mostly as a bookish expression used in purposefully high-register writing.

Contemporary spoken and written Hebrew has a variety of other ways of expressing apprehension, including the apprehensional possibility modal *alul* ‘liable’ inherited from Mishnaic Hebrew, and several constructions in which apprehensive interpretation arises inferentially in particular contexts, by the use

of expressions that do not conventionally encode either possibility or undesirability. This paper describes and outlines an informal analysis of three such constructions in detail: the apprehensional use of the additive / temporal particle *od* ‘still / yet / more / another’, the apprehensive use of the temporal adverbial *axar kax* ‘afterwards’, and the matrix and non-matrix use of clauses introduced by *še-lo* ‘that not’.

The apprehensive marker *pen* resembles *lest*-type markers found across languages and discussed in the literature, including several studies in this volume (Lichtenberk 1995; Angelo & Schultze-Berndt 2016; Puskás 2017 *inter alia*), and appears in all three contexts distinguished by Lichtenberk (1995): apprehensive (marking a matrix clause) and precautioning (marking a coordinate or perhaps subordinate clause). There is no clear evidence that *pen* can mark the complement clause of verbs of fear. The apprehensional use of the additive/temporal *od* can arise in matrix and embedded clauses as well as in the complement clauses of verbs of fear. Both *pen* and the apprehensional use of the complementizer + negation sequence *še-lo* raise the problem, discussed in the literature and in several papers in this volume (schultz-berndtet; wiemer), of lexemes occurring both in hypo/para-taxis and in matrix contexts.¹ In the case of *še-lo*, as in the Slavic cases discussed by Wiemer (see also Baydina 2016), the problem is complicated further by the presence of negation which, as shown below, is not straightforwardly simple clausal negation occurring in a subordinate clause.

This paper argues that the apprehensive marker *pen*, like the possibility modal *alul*, is semantically a possibility modal associated with a conventional implicature of bouletic dispreference for the proposition expressed by its prejacent. Precautioning contexts, I argue, do not involve distinct interpretations or functions. Rather, a precautioning context is a name for a distributional environment, namely for the occurrence of an apprehensionally marked clause in construction with another clause. The ‘negative purpose’ or ‘in case’ inferences that arise in precautioning contexts, i.e. the inference that the eventuality described in the main clause can prevent the one described in the prejacent or some consequence of it, are argued to arise from the textual interpretative effects of parataxis (or hypotaxis, as the case may be). The analysis I propose for ‘in case’ and ‘avertive’ inference closely resembles that proposed in AnderBois & Dąbkowski (2021).

Apprehension with the additive particle *od* ‘too / another / still / yet’ is shown to be a pragmatic inference that arises only in specific contexts from a special

¹In the case of *še-lo* this is particularly clear, because *še* is clearly a subordinator and its occurrence in matrix clauses is both relatively new and highly restricted. See Schwarzwald & Shlomo (2015) and Francez (2015) for discussion.

future oriented, temporal-additive interpretation of this particle, elucidated in section 5, where it is shown to be the same as that of the less-studied positive-polarity use of English *yet*. In both English and Hebrew, these temporal additives can also give rise to an inference of *anticipation*², which is the exact opposite of apprehension, in that the possibility described by the prejacent is inferred to be bouletically preferred.

Finally, for the use of complementizer *še* + negation, I discuss some suggestive, but by no means conclusive, evidence for the possibility that the complementizer and negator form, synchronically speaking, a grammaticalized new apprehensive marker.

2 Biblical Hebrew *pen*

The marker *pen* is one of a class of clause-initial lexemes found in Biblical Hebrew. Because clauses marked with *pen* are usually in construction with other clauses, *pen* seems like a subordinating connective, syntactically similar to English *that*. Much like with its English rough counterpart *lest*, however, clauses marked with *pen* can also serve as matrix, independent clauses, which might be viewed as instantiating “insubordination” in the sense of Evans (2007). Doron (2019) classifies *pen* together with a host of other similar clause-initial items as complementizers.³ The evidence that *pen* is a complementizer comes from its complimentary distribution with a class of elements which function to introduce subordinate clauses. As far as I am aware, however, there are no clear syntactic tests that can determine whether *pen*-clauses involve parataxis or hypotaxis, and as Doron notes, both hypotheses can be found in the literature. I assume in this paper that *pen* is not in fact a subordinator, but a complementizer able to introduce matrix and subordinate clauses alike.

Clauses introduced by *pen* are predominantly irrealis, featuring verbs in the *yiqtol* template (i.e. the yi-CCoC template). The exact nature of this template is a matter of much controversy. In Modern Hebrew, this is a future tense form used for future time reference, but also has various other irrealis uses that intuitively involve modality. I therefore follow Doron here in glossing this verbal form as

²I thank Tran Truong for suggesting this term to me

³In contemporary generative usage, the term “complementizer” does not entail subordination. Rather, ‘complementizer’ is a label for a syntactic category of expressions that are claimed to share a distribution. For example, *wh*- words in English, such as *which* or *who*, are usually taken to be complementizers. Belonging to this category does entail various properties, such as occupying (or being generated in) a certain position in the clause relative to other elements.

MOD for “modal”, without committing to what exactly its semantics should be. In a few cases, *pen* marks a clause with present or past temporal reference.

2.1 Co/subordination

In hypotaxis or parataxis with another clause, the *pen* marked clause is, in the vast majority of cases, preceded by a directive clause. A typical example is given in (1).⁴

- (1) u-mi-pri ha-ec ašer be-tox ha-gan amar elohim lo
and-from-fruit.cs the-tree that in-inside the-garden said God NEG
toxlu mi-menu ve-lo tig'u bo pen
eat.MOD.2.MPL from.3MSG and-NEG touch.MOD.2MPL in.3MSG APP
temutun.
die.MOD.3MP
...but from the fruit of the tree in the midst of the garden God has said,
'You shall not eat from it and you shall not touch it, lest you die'. (Genesis
3: 3)

As discussed by Azar, in this as in many other occurrences in the Bible, the *pen*-clause is preceded by a clause with directive force. While in (1) the main clause is not imperative, but rather is also in the *yiqqtol* template, its force is nevertheless directive. Another example, one in which the main clause is in the imperative, is given in (3)

- (2) wa-ya'icu ha-malaxim be-lot le'emor kum kax et
and-hastened the-angel.PL in-Lot say.INF rise.IMP take.IMP ACC
ištexa ve-et šte bnotexa ha-mica'ot pen
wife.cs.2MSG and-ACC two.F.cs daughter.PL.cs.2MSG the-present APP

⁴All translations of Biblical examples in this paper are taken from Robert Alter's recent translation of the Hebrew Bible (Alter 2018). For simplicity and ease of reading, Hebrew examples in this paper are transliterated as if they were Modern Hebrew. This entails a great simplification and gross misrepresentation of phonological, morphological, and morphophonological information about the Biblical and Mishnaic language as well as the early modern revivalist language. Since representing this information involves complex and often theoretically laden choices. Since this information is entirely immaterial to the goals of this paper, I omit it here and indicate only as much information as is needed to understand the examples and relevant aspects of their structure. The reader should bear in mind, however, that as far as pre-Modern Hebrew is concerned, the transliterated examples do not accurately render phonology, morphophonology, and some of the morphosyntactic structure of verbs. In transliteration and glossing, I use - to separate non-inflectional morphology, and in glossing I use . to indicate inflectional information.

tisape ba-avon ha-ir.
 perish.MOD.2MSG in.the-iniquity.cs the-city

...the messengers urged Lot, saying: “Rise, take your wife and your two daughters who remain with you, lest you be wiped out in the punishment of the city”. (Genesis: 19: 15)

The sentence preceding a *pen*-marked clauses need not have directive force, and can be a simple declarative, as in (3).⁵

- (3) va-anoxi lo 'uxal lehimalet ha-hara **pen**
 and-I NEG can.MOD.1SG escape.INF the-mountain.ALL APP
 tidbakani ha-ra'a va-matti.
 catch.MOD.3FSG.1SG the-evil.F and-die.1SG
 ...But I cannot flee to the high country, lest evil overtake me and I die.
 (Genesis 19:19)

In some cases, the *pen*-marked clause is plausibly analyzed as the antecedent of a conditional (and is indeed thus analyzed by Azar 1981). An example is (4).

- (4) arba'im yakenu lo yosif **pen** yosif
 forty hit.MOD3MSG.3MSG NEG add.MOD.3MSG APP add.MOD.3MSG
 lehakoto al ele maka raba ve-nikla axixa
 hit.INF.3MSG on these blow great and-dishonour.3MSG brother.cs.2MSG
 le-eyneda.
 to-eyes.cs.2MSG
 ...Forty blows he may strike him, he shall not go further, lest he go on to strike him beyond these a great many blows, and your brother seem of no account in your eyes. (Deuteronomy 25:3)

While Robert Alter's translation does not render these verses as a conditional, other translations do. For example, the JPS Bible translates this passage as follows: *if he should exceed, and beat him above these with many stripes, then thy brother should be dishonoured before thine eyes.* I cannot determine here with any certainty whether, in this and similar cases (such as (1) above), a conditional analysis should be adopted, and note only that if such an analysis is correct, the result, while broadly compatible with the informal idea that *pen* marks its prejacent as

⁵The form *va-matti* in (3) is an instance of the *ve-qatal* verbal form, which is, very roughly, an irrealis form occurring in narrative sequence. See Hatav (1997) for a discussion of the complicated system of indicating time and modality in Biblical Hebrew within a generative framework.

expressing a dis-preferred possibility, has potential consequence for the analysis of conditionals.⁶

While *pen* mostly introduces clauses with a future or modal interpretation, in a few cases it marks a clause in the present or past tense. This is shown in (5) for the present and in (6) for the past.

- (5) pen yeš baxem iš o iša o mišpaxa o švet ašer levavo
APP exist in.3MPL man or woman or family or clan that heart.cs.3MS
pone ha-yom me-im YHWH elohenu ... lo yove YHWH
turns the-day from-with YHWH God.cs.1PL ... NEG agree YHWH
salo'ax lo.
forgive.INF to.3MSG

Should there be among you a man or a woman or a clan or a tribe whose heart turns away today from the LORD our God to go worship the Gods of those nations ... The LORD shall not want to forgive him.

(Deuteronomy 29:17)

- (6) yelxu na v-yvakšu et adoneyxa PEN nesa'o
go.MOD.3PL DIR and-search.3PL ACC master.cs.2SG APP carried.3MSG.3MSG
ru'ax YHWH va-yašlixehu be-axad he-harim o
spirit.cs YHWH and-throw.3MSG.3MSG in-one.cs the-mountain.PL or
be-axat ha-geva'ot.
in-one.F.cs the-valley.PL

Let them go, pray, and seek your master, lest the spirit of the LORD has borne him off and flung him down on some hill or into some valley. (2 Kings 2:16)

The interpretation of (5), as Alter's translation indicates, is another case in which a *pen* clause is interpreted similarly to the antecedent of a conditional. However, it could equally be seen as a matrix occurrence of *pen*, simply asserting the possibility of something undesirable. Sentence 6 is an instance of what Lichtenberk called the "in case" interpretation, where the *pen*-marked clause describes an issue which is already metaphysically settled at the time of utterance, but remains epistemically open. In this case, searching for the master (the prophet

⁶For example, conditional antecedents are not generally assumed to have the assertive content of a modal, though they are plausibly assumed to carry a modal presupposition (see e.g. Leahy 2011). Furthermore, sentences like 4, if analyzed as conditionals, arguably carry a non-cancellable inference of conditional perfection. Presumably, 4 entails that if the blows do not exceed a certain threshold, the resulting dishonouring of the victim is avoided.

Elijah in the context) cannot possibly affect the already determined facts about whether the Lord has flung him on a hill or into a valley, but can avert some undesirable consequence of this possibility. These examples are discussed in more detail in section 3.

Examples (7) and (8) demonstrate occurrences of *pen* in construction with verbs of precaution or fear. In principle, these could be viewed as instances of *pen* marking a complement clause.

- (7) hišamer lexā **pen** tašiv et bni šama
 beware to.2MSG APP return.MOD.2MSG ACC son.cs.1SG there.ALL
 Watch yourself, lest you bring my son back there. (Genesis 24:6)

In the context, the *pen*-makred clause in 7 arguably describes the content of what is to be avoided, rather than merely the justification for the directive *watch yourself*. The directive issued by the speaker (Abraham in the context) is an answer to a question: *should I bring your son back?* The issued directive is to be careful not to bring the son back. In other words, this verse could equally well be translated as *be careful that you don't bring my son back from there*.

In (8) as well, one might argue that the *pen*-marked clause indicates what it is exactly that the speaker, Jacob, fears about his brother Esau. This line of analysis is reflected in the English Standard Version Bible translation of the verse: *Please deliver me from the hand of my brother, from the hand of Esau, for I fear him, that he may come and attack me, the mothers with the children.*

- (8) ki yare anoxi oto **pen** yavo ve-hikani
 for fear.1MSG I ACC.3MSG APP come.MOD.3MSG and-strike.3MSG.1SG
 em al banim
 mother on son.PL
 For I fear him, lest he come and strike me, mother with sons. (Genesis 32:12)

However, as Azar (1981) argues, there is not a single clear instance of a *pen* marked clause occurring as the direct complement of a verb of fear in the Bible. This makes an analysis in which the *pen* clause in (7) is in construction with the directive clause, and the one in (8) is an adjunct providing the motivation for the matrix assertion (*I fear him*, seem more plausible, with the caveat that, semantically speaking, this is not an obvious conclusion for 7.

2.2 Matrix occurrences

In a few cases, *pen* can also occur on a matrix clause (9), in which case the sentence asserts that something undesirable is possible.

- (9) ve-ata **pen** yišlax yado ve-lakax gam
and-now APP send.MOD.3MSG hand.cs.3MSG and-take.3MSG also
me'-ec ha-xayim ve-axal va-xay le-olam
from-tree.cs the-life and-eat.3MSG and-live.3MSG to-eternity
He may reach out and take as well from the tree of life and live forever.
(Genesis 3:22)

- (10) **pen** yasit etxem hizkiyahu YHWH yacilenu
PEN incite.MOD.3MSG ACC.3MPL Hezekiah say.INF YHWH
ha-hicilu elohey ha-goyim iš et arco
save.MOD.3MSG.1PL Q-save.3PL god.cs.PL the-nation.PL one ACC
mi-yad melex ašur
country.cs.3MSG from-hand.cs king.cs Assyria
Lest Hezekiah mislead you, saying the LORD will save us. Did the gods of
the nations ever save each its land from the hand of the king of Assyria?
(Isaiah 36:18)

3 *pen* as a modal complementizer and the semantics/pragmatics of apprehension

The data presented above show that all occurrences of *pen* in the corpus always involve both of the characteristic inferences of apprehension: possibility and bouleptic dispreference. This, coupled with the fact that *pen* can occur on a matrix clause and hence is not straightforwardly a subordinating (or coordinating) conjunction, makes it natural to analyze it as a modal complementizer. Semantically, I assign *pen* the meaning of a possibility modal that furthermore carries a conventional implicature that its prejacent is bouleitically dispreferred. In other words, *pen* takes a proposition, asserts its possibility, and automatically adds to the common ground that it is undesirable, i.e. false in all the worlds in which the speaker's desires are met.⁷ While the limited corpus of the Hebrew Bible does

⁷The assumption that it is the speaker's desires, rather than the addressee's, for example, is difficult to establish within the relatively small corpus of the Biblical text. I have not seen any clear cases where the context clearly distinguishes the speaker's bouleptic preferences from the addressee's and where the *pen*-clause clearly alludes to the latter rather than the former.

not afford the possibility of testing that undesirability is backgrounded, rather than “at issue”, content, this seems a reasonable assumption given the nature of similar markers in other languages. For example, the dispreference inference associated with English *lest* is clearly not at issue.⁸ The semantics proposed for *pen* is given in (11). That the undesirability content is not presupposed is clear from the contexts in which *pen*-marked clauses appear, which do not entail such undesirability as part of the common ground.

(11) The semantics of *pen*:

A clause with the complementizer *pen* expressing a proposition *p*:

- a. asserts the possibility of *p*
- b. conventionally implicates that there is a contextually salient *q* that is causally dependent on *p* and bouletically dispreferred.

Clause (b) of (11) does not directly state that the prejacent of *pen* is what is dispreferred, but rather than some causal consequence of this prejacent is dispreferred. This feature of the analysis, which seems strange at first, is what allows it to capture the difference between the three “functions” identified by Lichtenberk (1995), as explained in the rest of this section.

3.1 The apprehensional-epistemic function

What Lichtenberk calls the “apprehensional-epistemic” function is the case in which an apprehensive marker occurs in a matrix context, as exemplified in the To’aba’ita example (12).

- (12) ada ’oko mata’i. (To’aba’ita, Lichtenberk 1995: 294)
 lest you.SG.SEQ be.sick
 You may be sick.

That Biblical Hebrew *pen* can occur in matrix contexts with the same kind of meaning was shown in examples (9) and (10) in section (2.2) above. As the translations of those examples indicate, these sentences assert the possibility of an eventuality taken to be undesirable by the speaker, as expected. In terms of the semantics proposed in (11), these are cases in which the proposition expressed by the prejacent of *pen* is also the causally dependent proposition conventionally

⁸This is evidenced, for example, by the fact that the dispreference inference cannot be targeted by explicit denial moves. In the dialogue in (i), B’s denial can either target the proposition that he was quiet, or the causal relation asserted to hold between that proposition and the dispreference for waking up the children, but it cannot be used to only deny that dispreference.

(i) A: He was quiet lest he wake up the children. B: No, that’s not true.

implicated to be undesirable, i.e. the proposition labelled r in (11b). Since every proposition is causally dependent on, and a consequence of, itself, a special case of (11b) is the case in which $r = q$, and it is this case which comprises the so-called “apprehensional epistemic” function.⁹

3.2 The precautionary function

What Lichtenberk calls the “precautionary” function of apprehensive markers are those cases in which an apprehensive clause occurs in hypotaxis and/or parataxis with another clause. These cases, exemplified for *pen* in section (2.1) above, give rise to inferences beyond undesirability, which Lichtenberk calls the *avertive* and *in case* inferences. The *avertive* inference is the inference, seen in examples like (3), that the eventuality described by the non-apprehensional clause would avert the undesirable possibility described by the *pen*-marked clause.

The *in case* inference is the inference, seen in examples like (6), that the eventuality described by the non-apprehensional clause cannot avert the possibility described by the *pen*-marked clause (in this case, because the question of the realization of this possibility is already settled), but can prevent some undesirable consequence of it.

In terms of the semantics of *pen* proposed in (11) above, the *in case* inference is just a special case of the avertive inference. In both cases, what is to be averted is the contextually salient proposition q that is conventionally implicated to be bouleitically dispreferred and causally dependent on the prejacent. In the case of *avertive* inferences, this q is just the prejacent itself (as was the case in matrix cases discussed in the previous subsection), and in the case of *in case* inferences, the two are distinct, with q being a potential consequence of the prejacent.

Given that avertive and *in case* inferences are not present when *pen* occurs in a matrix context, they cannot be part of the conventional meaning of *pen*, raising the question why they arise when *pen* clauses occur in construction with another clause. My suggestion is that these are inferences due to discourse coherence principles, which may be ultimately rooted in Gricean reasoning.

If avertive / *in case* inferences are not linked to the conventional meaning of *pen*, then they are expected to arise quite independently of the presence of this marker, which they indeed do, as shown in (13).¹⁰

⁹This is a point where the proposed analysis diverges from the one developed in AnderBois & Dąbkowski (2021), where the apprehensional item analyzed, the A'ingae morpheme =sa'ne, does not have matrix occurrences, and is therefore analyzes as always relating two propositions that are compositionally supplied.

¹⁰Of course, the reverse does not hold – the fact that an inference arises independently of the

(13) Take your family and leave. You might perish with the destruction of Sodom.

As stated, the idea that avertive inferences are linked to textual / discourse coherence principles is not much more than an intuition. Turning it into an analysis requires a worked out theory of such coherence principles, which I cannot offer, but on which there is an extensive literature (see for example Hobbs 1985; Lascarides & Asher 1993; 2003; Asher & Lascarides 2003). However, I suggest here a rough outline of how standard Gricean pragmatic reasoning might account for how these inferences arise.

A first important point is that avertive inferences in parataxis only arise when the matrix sentence (the one that is not the prejacent of *pen*) has directive force. otherwise, the inference that arises is, roughly, one of explanation. For example, in (3), repeated here as (14) no avertive inference arises directly (the speaker's inability to flee to the high country is not implied to prevent anything). Instead, the inference arises that the *pen*-marked clause explicates a *reason* for the statement in the first clause.

- (14) va-anoxi lo 'uxal lehimalet ha-hara pen
 and-I NEG can.MOD.1SG escape.INF the-mountain.ALL APP
 tidbakani ha-ra'a va-matti.
 catch.MOD.3FSG.1SG the-evil and-die.1SG
 ...But I cannot flee to the high country, lest evil overtake me and I die.
 (Genesis 19:19)

That Lot might be overtaken by evil explains why he cannot escape to the high country if doing so is what gives rise to this possibility. This, of course, means also that *not* doing so averts the undesirable possibility. This kind of *reason* inference, I propose, is what, coupled with directive force, is involved in the pragmatic reasoning that brings about avertive inferences. This is illustrated in (15).

(15) **Deriving avertive inferences**

- With a directive clause directing the addressee to do *A*, the Speaker recommends *A* over $\neg A$
- With an apprehensively marked clause, the Speaker asserts that an undesirable consequence *B* of the *pen*-marked clause is a possibility.
- By uttering the two in construction, the speaker indicates that the undesirable possibility *B* is a *reason* for her recommendation for *A* over $\neg A$.

presence of a marker does not preclude that it is also encoded conventionally by that marker. For example, causal inferences encoded by expressions like *because* often arise in the absence of this marker, as in a discourse like *I left. It was too noisy.*

- ~~> Speaker believes that choosing $\neg A$ leads to B , whereas choosing A averts B .

In the *avertive* case, as discussed, the undesirable consequence B of the prejacent is simply the eventuality described by the prejacent. The avertive inference in ?? thus arises differently than the one in 13. In 13, it is entirely a fact of world knowledge and a specific context that the second sentence describes an undesirable eventuality. Replacing that sentence with one describing a desirable eventuality, as in 16, destroys the inference. This is not possible with *pen*-marked clauses, which induce a bouletic dispreference inference conventionally.

- (16) Take your family and leave. You might find a better place to live.

So called *in case* inferences are just avertive inferences in which world knowledge rules out a causal relation between the eventuality described by the main clause and the one described by the prejacent, leading the hearer to infer that it is some consequence of the prejacent that is to be averted.¹¹ The pragmatic reasoning in this case works in the same way as in avertive inferences. The hearer takes the conventionally implied undesirable consequence of the eventuality described by the prejacent to be a reason for the speaker's recommendation to do A rather than $\neg A$, but in this case this consequence is not the prejacent-eventuality itself.

In summary, this section proposed that the Hebrew apprehensive marker *pen* is a complementizer or a left-periphery particle with the semantics of a possibility modal, and a conventional implicature that some contextually familiar consequence of the prejacent is dispreferred by the speaker. This makes the occurrence of *pen*-clauses in matrix contexts entirely unremarkable. Since *pen*-marked clauses do not give rise to so-called *avertive* and *in case* inferences unless they appear in construction with another clause, and since they arise also in cases in which no apprehensive marker is present, it is natural to view them as linked to textual structure. This remains, however, an indication of a potential direction rather than an analysis. Specifically, the idea is that these inferences arise pragmatically from reasoning about an explanatory relation between the two clauses, with the prejacent interpreted as providing an explanation for the assertion of the non-apprehensive clause, and world knowledge determining whether what is

¹¹In the Biblical corpus, *in case* inferences arise only when the *pen*-marked clause is in the present or past tense. This makes it tempting to try and derive *in case* inferences from the fact that the undesirable possibilities involved are metaphysically settled, and present only epistemic possibilities. However, the general availability of *in case* inferences with future-oriented clauses, as in *take an umbrella lest it rain*, argues against this line of analysis. I thank Eva Schultze-Bernd for pointing this issue out to me.

to be averted is the eventuality described by the *pen* clause or some other causal consequence of it.

Finally, the status of avertive and *in case* inferences emerges here as a point of crosslinguistic variation. In languages which have an apprehensive marker that is always subordinating (or coordinating), these inferences are conventional and are always present when the marker is present. An example of such a language seems to be A'inge as analyze by AnderBois & Dąbkowski (2021). In languages like Hebrew, the apprehensive marker occurs in matrix contexts and is essentially a possibility modal. In such languages, the relevant inferences much be derived independently of the conventional meaning of the marker.

3.3 The trajectory of *pen* in post-Biblical Hebrew

This section provides a brief and preliminary discussion of *pen* in post-Biblical varieties of Hebrew. Biblical Hebrew ceased to be a spoken language around the 2nd century CE. In the subsequent variety of Mishnaic Hebrew, *pen* was entirely replaced by the more general particle šema ‘whether/if/maybe’, used also in matrix and embedded questions, which marks possibility and can, but does not always, convey bouletic dispreference (see Segal 2001).

- (17) hevey zahir bi-dvarexa šema mi-toxam
 be careful in-words.cs.2MSG šema from-inside.cs.3MPL
 yilmedu lešaker.
 learn.MOD.3MPL lie.INF

Be careful with your words lest from them they will learn to lie. (Avot 1:9)

After the 2nd century, Hebrew no longer had native speakers, and subsequent varieties of Hebrew were written varieties, and the language did not have a spoken variety with a stable community of native speakers until the early 20th century. In Renaissance-era and early Modern Hebrew texts, *pen* is sometimes used as a modal/mood marker, co-occurring with a complementizer:

- (18) hodi'enu ma šimxa lada'at mi nexabed ki pen lo
 tell.2MSG.3PL what name.3MSG know.INF who honor.1PL.MOD for APP NEG
 nakirxa az
 know.1PL.3MSG then

Tell us your name so that we know who we are honoring for we might not recognize you then. (Rabbi David Alteschueler, Mecudat David, 1750s)

During the *haskala*, the Jewish Enlightenment movement, Hebrew revivalists, like Abraham Mapu (1808–1867), began using Biblical Hebrew in writing mod-

ern, secular, novelistic prose. In Mapu's writing, *pen* is used largely as described above for Biblical Hebrew. For later revivalists, *pen* starts losing its conventional implicature of undesirability, and is used in positive as well as in the neutral contexts in which Mishnaic *šema* is used.¹² This is exemplified in (19)-(21).

- (19) le-tum-i lo yada'ti az, ki nefeš ha-'ama
to-innocence.cs-1SG NEG know.PAST.1.SG then, that mind.cs the-maid
ſogevet ſlay bišvil cniſut-i, ve-hi ſoha be-xadr-i
lust.3FSG on.1SG for modesty.cs-1SG and-she stay.3FSG in-room.cs-1SG
yoter mi-day pen ve-'ulay 'etkarev 'ele-ha
more than-enough APP and-maybe approach.1SG to-3FSG
In my innocence, I did not then understand that the maid is lusting over
me for my modesty, and is lingering in my room, to see whether I might
come close to her. (Berdichevsky, Ḳorva parax, 1900)
- (20) va-yišme'u ha-mecora'-im va-yismexu ſal ha-davar
and-heard.3PL the-leper-PL and-rejoiced.3PL on the-thing
va-yomru 'iš 'el 'axiv: nelxa gam 'anaxnu 'el ha-'arec
and-said.3PL man to brother.cs-3MSG: go.IMP.PL also we to the-land
ha-hi, pen niga'el gam 'anaxnu
the-that, APP be.saved.1PL also we
And the lepers heard this and were glad, and said to each other: let us
also go to that country, we might also be saved. (Berdichevsky, ve-ſanu
ba cidkata, 1908)
- (21) **pen** šama' ſome'a / **pen** ra'u ha-ro'im / lo ra'ata ſayin / 'ozen lo
APP heard hearer APP saw.PL the-seeing NEG saw eye ear NEG
šam'a
heard
Maybe someone heard / Maybe someone saw / Not an eye has seen / An
ear has not heard / (Bialik, ha-na'ar ba-ya'ar, 1933)

In contemporary spoken Hebrew, *pen* has, together with all the other Biblical and Mishnaic left-periphery items, been abandoned in favor of a single complementizer / subordinator *še*. In writing, *pen* is still used, but mostly in high register

¹²All examples in this section are taken from the cited texts as they appear in the Ben-Yehuda Project, accessed using the repository created and kindly shared by Aynat Rubinstein for the Jerusalem Corpus for Emergent Modern Hebrew (see Rubinstein 2019). I thank Noam Tedelis for his invaluable help with the corpus work. The translations are my own.

prose style. Modern Hebrew thus does, however, have a more productive dedicated apprehensive marker, namely the modal *alul* ‘might’, discussed in the next section.

4 The modal *alul*

Contemporary Hebrew inherited from Mishnaic Hebrew two adjectival passives whose literal meaning is “made” or “done”. In Mishnaic Hebrew, these adjectives had only their literal sense, as shown in 22.

- (22) ha-asuy lešameš et ha-adam ke-gon ha-sulam
 that-made serve.INF ACC the-human as-aspect.cs the-ladder
 ... that which is made to serve humans, such as the ladder.

In the early revivalist period, both *asuy* and *alul* begin to be used as existential possibility modals meaning ‘might’ or ‘liable’, with no bouleptic implications, as in (23), where *alul* marks a presumably bouleitically preferred positive possibility.

- (23) kol ma še-eyno alul lehavi lo revaxim
 all what that-not alul bring.INF to.3MSG profit.PL
 everything that isn't liable to bring him profit (Yosef Brener, *šxol ve-kišalon*, 1922.

In contemporary usage, a distinction has been introduced, with many speakers (myself included) associating *alul* with a negative bouletic implication.¹³ This use of *alul* as a modal adjective can be analyzed in exactly the same way as proposed above for *pen*, the difference between the lexemes being combinatoric. While *pen* introduces a finite clause, *alul* is a “raising” adjective takes a nominal subject and an ininfinitival complement, similarly to English modal adjectives like *likely*, *liable*, etc. In terms of interpretation, *alul* takes as its a prejacent the proposition formed by applying the meaning of the ininfinitive to that of the subject, and the semantic analysis is the same as proposed above for *pen*.

¹³The (false) public perception is that this distinction is historically “correct”, see e.g. the discussion in the online forum of the Academy of the Hebrew Language at <https://hebrew-academy.org.il/2018/12/17/יזען-ולעלע/>

5 The apprehensive use of additive *od* (and temporal *axarkax*)

This section describes a common strategy for expressing apprehension in contemporary Modern Hebrew, especially in the spoken language, which involves the additive particle *od*. Generally, *od* has the meanings expected of an additive particle (Greenberg 2012). When modifying a clause, it is interpreted as an aspectual ‘continuative’ adverbial equivalent to English ‘still’ and German *noch*.¹⁴ When modifying a nominal, *od* is interpreted as ‘more’ / ‘another’. This is shown in (24).

- (24) a. šarti *od* širim.
 sang.1sg **od** songs
 I sang more / other songs.
b. hu *od* po.
 he **od** here
 He’s still here.

When *od* modifies a clause in the future tense, however, it has an interpretation different from the aspectual adverbial one, and on this interpretation, which I henceforth call *boding*, it can give rise to apprehensive inferences, as in (25)

- (25) a. al tedabri ito, hu **od** yaxSov še-at
 NEG.IMP speak.FUT.2FSG with.3MSG he **od** think.FUT.3MSG that-2FSG
 meunyenet.
 interested
 Don’t talk to him, he’ll end up thinking you’re interested.
b. amarti lo liyot be-šeket, hu *od* haya meir et
 told.1SG him be.INF in-quiet he **od** was.3MSG wake.MSG ACC
 ha-banot.
 the-girl.PL
 I told him to be quiet, he would have woken up the girls.

The boding reading of *od* is not new, though its use in contexts of apprehension is. In the Hebrew Bible, the boding reading of *od* occurs a few times in prophecy, always in the genre called “prophecies of consolation”, where the prophet prophesies a redemptive remote future contrasting with a wretched present and immediate future, as in (26) from Jeremiah.

¹⁴On aspectual adverbials, see Löbner 1985 and subsequent literature.

- (26) od evnex ve-nivnet betulat yisrael.
od build.MOD.1SG.2FSG and-be.built.2FSG maiden.cs Israel
 Yet will I rebuild you and you will be built, O Virgin Israel... (Jeremiah 31:3)

In the early revival literature, boding *od* starts to appear also in contexts where it leads to apprehensive inferences, as in the following examples from author Avraham Mapu.

- (27) da lexá ki lo arev ani lexá, ve-**od** tišlax
 know.IMP to.you that NEG assuring I to.you and-**od** send.MOD.3MSG
 yad be-nafšexa.
 hand in-soul.cs.2MSG

Know that (then) I cannot assure you and you might yet kill yourself.
 (Mapu, *ayit cavua*, 1857)

- (28) kaspi ve-zehavi yaase acabim, ve-**od** yefarek
 money.cs.1SG and-gold.cs.1SG make.MOD.3MSG idols, and-**od** take.off
 nizmek ve-xelyatex ve-herimam le-vošet.
 jewlery.cs.2FSG and-ring.cs.2FSG and-offer.MOD.3MSG.3PL for-idols
 He uses my money and my gold to make false idols and will yet remove
 your jewelry and rings and offer them for idols. (Mapu, *ašmat šomron*,
 1865)

The boding reading of *od* is easily distinguishable from the apectual one. On the temporal ‘still’ reading, *od* is always paraphrasable with the temporal adverbial *adayin* ‘still/yet’, a paraphrase not available in (25). As mentioned in the introduction, however, when *od* modifies a future verb phrase, it can also give rise to inferences of *anticipation*, which is the opposite of apprehension in that the actuation of an anticipated possibility is desired. This is exemplified in (29), a line of poetry, and (30), which is naturally occurring. In both of these examples, *od* clearly is not interpreted as ‘still’.

- (29) **od** omar lax et kol ha-milim ha-tovot še-yešnan,
od say.MOD.1SG to.you acc all.of the-words the-good that-exist.3FPL
 še-yešnan adayin.
 that-exist.3FPL still

I will say to you yet all the beautiful words that there are, that there are still remaining. (Natan Alterman, *od ašuv el sipex*, 1938)

- (30) al tafsik lehitamen! ba-sof **od** tenaceax oti.
NEG.IMP stop.2MSG practice.INF in.the-end **od** beat.FUT.2MSG me
Don't stop practicing! In the end you will yet¹⁵ beat me.

The boding reading of *od* is also distinguishable from its aspectual ‘still’ reading in its interaction with negation. The temporal adverbial *od*, when occurring with negation, predictably means *not yet*, as in (31). When *od* occurs with negation on its boding reading, as in the naturally occurring example (32), it cannot be interpreted as *not yet*. Instead, it communicates that the non-occurrence of the eventuality described by the modified verb phrase is predicted to occur and is (un)desirable. In example (32), which occurs in the context of a story about failures to deal with sexual harassment in organized sports, the writer is being sarcastic.

- (31) be-eser hu **od** lo yagia.
in-ten he **od** NEG arrive.FUT
At ten he will not yet arrive.
- (32) im ze yimašex kaxa, ba-sof **od** lo tiye lahem
if this continue.FUT.3MSG thus in.the-end **od** NEG be.FUT.3FSG to.3MPL
brera ela lemanot iša la-tafkid.
choice except appoint.INF woman to.the-position
If it goes on like this, in the end they will have no choice but to appoint a woman to the position.¹⁶

Finally, the two uses also differ in prosody. While (31) can have pitch accent on *od*, this is not possible in (32).

The fact that *od* on its boding interpretation, need not lead to apprehensive inferences shows that apprehension is not part of the conventionally encoded meaning of *od*. Similarly, while (25) demonstrates that the boding reading of *od* can give rise to precautioning readings of the kind discussed above for *pen*, (30) clearly shows that it need not do so.

These observations raise the question of what the actual interpretation of *od* is in this context, and why it gives rise to apprehensive and anticipation inferences

¹⁵There is an interesting parallel to be drawn between additives with boding readings like *od* and the positive polarity use of *yet* exemplified in this translation. Positive polarity *yet* also bears some interesting connection to additives, as seen in locutions like *yet again* and *yet another*. Positive polarity *yet* seems to me to be amenable to the same analysis proposed below for *od*, but an exploration of this item and of this hypothesis must be left for a future occasion.

¹⁶<https://www.haaretz.co.il/gallery/mejunderet/.premium-1.2089786>

when it does. In what follows I propose a preliminary, informal analysis of *od* as an alternative-sensitive temporal additive, which takes as its prejacent a future oriented proposition, and the interpretation of which, like that of other additives, involves sensitivity to alternatives. Intuitively speaking, my analysis of such temporal additives is that sentences that feature them assert that something that is not currently a historical necessity will become, if things continue as they are, a historical necessity in the future.

Before stating the required semantics, it is useful to situate *od* in a broader context of temporal expressions that give rise to apprehension inferences. The harnessing of future oriented expressions to express apprehension is a known phenomenon across unrelated languages. Angelo and Schultze-Berndt (2016; 2018) describe apprehensive uses of the German adverbial *nachher* ‘afterwards’, as well as apprehensive uses of the adverbial *bambai* in Kriol, which expresses a relation of subsequentiality (see also Phillips 2018; 2021 for an extensive analysis). The apprehensive use of *nachher* is exemplified in (33) (example (12) in Angelo & Schultze-Berndt (2018))

- (33) Context: Offer of a last-minute start place at a motor race (on a racing forum)

Ne, lass mal! **Nachher** haue ich da noch jemanden raus!
no let PART APP/later hit.ISG.PRS 1SG there PART someone out
No, (let's) leave it. I might end up kicking someone out!¹⁷

In fact, the Hebrew equivalent of the German *nachher*, the temporal adverbial *axarkax* ‘afterwards’, has the same apprehensive use, as exemplified in (34), as does the English ‘afterwards’, as the translation of (34) shows.

- (34) “al tidxi et ze”, odeda et acma, “axarkax
NEG.IMP postpone.FUT.2FSG ACC it coax.3FSG ACC self.CS.F APP
tiškexi ve-ha-sipur yaxzor al acmo”.
forget.FUT.2FSG and-the-story return.FUT.3MSG on self.cs.3MSG
“Don’t leave it for later” she coaxed herself, “afterwards you’ll forget and
the same story will happen all over again”.¹⁸

Angelo and Schultze-Berndt demonstrate that German *nachher*, on its apprehensive use, can also introduce undesirable possibilities that are metaphysically already settled at the time of utterance, but epistemically open for the speaker, and can also give rise to Lichtenberk’s *in case* readings discussed above. My own

¹⁷<https://www.well-rc.de/include.php?path=forumsthread&threadid=1300&entries=0>

¹⁸<https://www.ynet.co.il/articles/0,7340,L-5573412,00.html>

intuition is that this is not the case with Hebrew *axarkax*, but determining this would require a more thorough empirical investigation of this expression than I can offer here. What is important in the current context is that, as put forth by Angelo and Schultze-Berndt, the future orientation of temporal adverbs entails a modal component in their interpretation, which seems to be linked to their propensity to give rise to apprehensive inferences.

The case of *od* is interesting against this general picture, because, as discussed above, *od* is an additive that doubles as a temporal aspectual adverbial. A similar additive used both as an aspectual adverbial and with a boding interpretation is the German additive particle *noch*. German *noch* functions as an aspectual particle meaning ‘still’ as well as an additive meaning ‘another’, and it also has a boding reading in which it states the prospective occurrence of a future event. Löbner (1985) provides the example in (35)¹⁹.

- (35) Sie kommt noch.
she comes noch
She will yet/eventually come.

This boding use of *noch* (which often accompanies *nachher*, see example (33) above) also give rise to apprehensive interpretations, as in the naturally occurring example in (36).

- (36) “Zieh dich warm an, sonst wirst du noch krank” –
dress yourself warm PRT otherwise be.sc fut.2sg you noch sick
diesen Rat dürfte wohl jeder schon einmal gehört haben.
this.ACC advice could PRT everyone already once heard have.INF
“Dress warmly, otherwise you might get sick” – anyone might have heard
this piece of advice before.”²⁰

As with Hebrew *od*, the boding reading of *noch* only gives rise to apprehensive inferences in particular contexts, and can also be used in contexts in which the future possibility expressed by the prejacent is a positive one²¹

¹⁹Löbner briefly discussed the difficulties of accounting for it under an analysis in which the prejacent of *noch* contains a hidden prospective operator. As far as I can tell, the boding reading of *noch* is not discussed in Beck’s (2020) overview.

²⁰<https://www.stern.de/gesundheit/kann-man-durch-kaelte-krank-werden--7225130.html>

²¹According to Angelo and Schultze-Berndt, the future oriented use of *nachher* discussed above cannot easily be used in positive contexts. Its apprehensive component therefore seems to be more conventionalized.

- (37) Ich werde noch gewinnen
 I will noch win.INF
 I will yet/eventually win.²²

The issue for an analysis of the boding reading of additives like *od* and *noch* is determining their lexical meaning in a way that captures their additive nature and allows an explanation for their propensity to give rise to apprehensive inferences in some contexts and to anticipation inferences in others. The analysis I propose, the basic insight of which is due to Ashwini Deo (through personal communication), is given in (38).

- (38) The semantics of boding additives:

- PRESUPPOSES: the prejacent is not instantiated in the interval *I* that runs from a contextual left boundary *lb* up until and including now.
- ASSERTS: there is an alternative interval *j* starting at *lb* at which the prejacent is instantiated.

That the alternative interval *j* asserted to instantiate the prejacent is a future one, not one that ends at utterance time, is ensured by the presupposition. If it were a subinterval of *I*, then, necessarily, *I* would also verify the prejacent, contrary to what is presupposed.

I follow Angleo and Schultze-Berndt in assuming that the propensity of boding additives to give rise to apprehensive inferences is linked to their future orientation. A sentence with the boding *od/noch* ends up asserting that something that is now not a metaphysical certainty (hence might never happen), will nevertheless be a metaphysical necessity in the future. For example, while the interval that runs up to now does not secure that *we win* will become true in all possible futures, a longer interval that extends into the future DOES ensure that. In a context in which our winning is taken to be desirable for the interlocutors, the assertion leads to an anticipation inference (it communicates that something desirable is possible). In a context in which it is undesirable, the assertion is also a warning. Angleo and Schultze-Berndt, however, make the very interesting observation that German *nachher* cannot be used to perform the speech act of a threat. My intuition is that this is equally true for Hebrew *od*. The eventualities depicted by the prejacent of *od* tend to not be under the control of the speaker, and have more to do with inertial development.

²²https://meineveranstaltungen.nuernberg.de/export.php5?typ=nbgdetail_re&miniweb=portal&vID=87298&vDatum=2019-05-23+19%3A30

6 še-lo: complementizer + negation

In this section, I very briefly describe another strategy of apprehension involving the interaction of the subordinator še with negation. Rubinstein et al. (2015) show that this strategy is attested already in Mishanaic and Rabbinical Hebrew and survived through the various written stages of the language. It is very common, and informal, in Modern Hebrew.

Normally, sentential complements of verbs of apprehension describe the eventuality the occurring of which the speaker is worried about. For example, in (6), the speaker is worried about recognition when no negation is present, and about non-recognition when it is present.

- (39) I worried / feared that they would (not) recognize me.

However, in Hebrew, as in many other languages, a negative sentential complement of a verb of fear can also behave as if it lacked negation altogether, as in the naturally occurring (40).

- (40) paxadeti še-lo yagidu še-ani tipša.
feared.1SG that-NEG say.FUT.3PL that-I stupid.F

I was scared that they would say I'm stupid.

Sentences like (40) are ambiguous. On one reading, the one actually conveyed by (40) in the context in which it occurred and reflected in the translation, the complementizer and negation sequence še-lo can be said to be much like an apprehensive marker in a language in which such markers introduce complements of verbs of fear. What the speaker fears in (40) is that people will say she is stupid, not that they would not say so. Similar cases in Romance have been argued to involve “expletive negation”, but there is no consensus as to what expletive negation is, whether or not the contexts in which negation seems to be expletive or superfluous form a natural class, and, of course, how such negation should be analyzed (see for example tahar-SLE; van der Wurff 1999; Abels 2005; Eilam 2009; Yoon 2011; Makri 2013; Puskás 2017; Dobrushina 2021 among many others).

I suggest here tentatively that in Hebrew, še+lo has been reanalyzed as a complex modal complementizer, interpreted much like *pen*. The fact that negation is not morphologically fused with the complementizer and can appear inside the prejacent seems to be an immediate and strong argument against this suggestion. Nevertheless, I put forth here a few considerations that support it. I suggest further that še+lo freely alternates with še in the complement of fear verbs, since such verbs already lexically encode possibility and undesirability, obviating the need for marking apprehension.

Some evidence that negation is not interpreted semantically in the embedded clause comes from the fact that *še-lo* can co-occur with another negation inside that clause, as in the naturally occurring (41).

- (41) paxadeti še-lo lo yiša'ér klum.
 feared.1SG that-NEG NEG remain nothing
 I was scared that there would be nothing left.

Another piece of evidence is that, unlike sentential negation, *še-lo* negation can precede the subject:

- (42) a. yadati še mišehu lo yavo.
 knew.1SG that someone NEG come.FUT.3MSG
 I knew that someone wouldn't come.
- b. *yadati še-lo mišehu yavo.
 knew.1SG that-NEG someone come.FUT.3MSG
 Intended: I knew that someone wouldn't come.
- c. paxadeti še-lo mišehu yavo.
 feared.1SG that-NEG someone come.FUT.3MSG
 I was scared that someone would come.
- d. paxadeti še-mišehu lo yavo.
 feared.1SG that-someone NEG come.FUT.3MSG
 I was scared that someone wouldn't come.

A third piece of evidence comes from the interpretation of the aspectual adverb *kvar* ‘already’. This expression cannot, or at least not easily, occur in the scope of regular sentential negation and receive the intended “not yet” interpretation. To the degree that (43b) is acceptable, it can only be a metalinguistic response to an assertion that it is already too late. Instead, the negation of (43a) requires the adverbial *adayin* ‘still/yet’, similarly to negating English sentences with ‘already’.

- (43) a. meuxar miday kvar.
 late too already
 It's already too late.
- b. ?? lo meuxar miday kvar.
 NEG already late too
 It's not (the case that it is) too late already.
- c. lo meuxar miday adayin.
 NEG late too syet
 It's not too late yet.

In this respect, the negation in *še-lo* sentences does not behave like sentential negation, in that *kvar* is licensed in *še-lo* sentences in the complement of fear verbs, and is interpreted as expected if that clause does not contain negation. While not all consultants like (44), which is very colloquial, all have very clear intuitions about what it means.

- (44) paxadti še-lo meuxar miday kvar.
feared.1SG thatNEG already late too
I was scared that it might already be too late.

These data taken together seem to me to lend support to viewing negation in these cases as not forming part of the embedded clause, outweighing the fact that it can occur syntactically inside that clause, but I do not try to construct and defend a full analysis here.

There is also evidence that *še-lo* is, semantically speaking, parallel to apprehensive modal complementizers like *pen* and *lest*. First, *še-lo* can occur in hypotaxis, generating avertive inferences, much like was shown for *pen* above. The naturally occurring (45) is an example of this. In (45), what the addressee is asked to avert (by being careful) is that they get beat up, not that they don't get beat up.

- (45) tizaher še mišehu #(lo) yarbic lexa.
careful.FUT.2MSG that someone NEG hit.FUT.3MSG to.you
Watch out that someone #(doesn't) beat you up.

Finally, similar complementizers arguably exist in other languages. For example, the Hungarian *nehogy* (Szabolcsi 2002; Puskás 2017), which is composed of modal negation *ne* and complementizer *hogy*, as been argued to be a modal complementizer.

- (46) Taxi-val ment, ne-hogy le-késse a vonatot.
taxi-INSTR go-PAS-3S MOD.NEG-that PART-miss.SUBJ the train.ACC
She took a taxi, lest she miss the train. (Puskás' ex.15b)

As Puskas shows, *nehogy* differs from occurrences of *hogy ... ne* in detectable ways, some of which are the same ones that distinguish *še+lo* from *še ... lo*. *Nehogy*, unlike *hogy ... ne*, does not allow prefixes that can follow the verb to do so (see Puskas' extensive discussion), and, just like *še-lo*, it licenses positive but not negative polarity items.

These arguments, taken together, make an at least *prima facie* plausible case for viewing *še-lo* as a complex apprehensive complementizer, or as moving towards becoming one in Modern Hebrew. Future research will have to decide whether

this is ultimately a plausible route of analysis, and if so, what it implies for the typology of apprehensive markers. For example, it does not seem that *še-lo* can occur in matrix clauses expressing that its prejacent is possible and undesirable, like was seen above for *pen* and *alul*. When clauses introduced with *še-lo* occur as matrix clauses, they always express a wish, as in (47).

- (47) še-lo yigamer li ha-kesef!
 that-NEG end.FUT.3MSG to.me the-money
 May I not run out of money!

Similarly, It does not seem that *še-lo* can be used with sentences that give rise to “in case” inferences. (48) represents my own judgment. While it is perfectly grammatical and interpretable, it only has the pragmatically odd avertive interpretation, namely it gives rise to the inference that taking an umbrella might avert the rain.

- (48) #kax mitriya še-lo yered gešem.
 take.IMP umbrella that-NEG go.down.fut.3msg rain
 #Take an umbrealla so that it doens’t rain. (Intended: take an umbrella, in case it rains.)

7 Conclusion

This paper surveyed four key ways in which Hebrew expressed and expresses apprehension at various stages of its highly non-linear history. I proposed that apprehensive complementizers like Biblical Hebrew *pen* are, semantically, possibility modals that carry a non-at issue bouletic dispreference content (which I labeled, conveniently, a conventional implicature). The kinds of inferences that Lichtenberk (1995) calls ‘avertive’ and ‘in case’ were argued to have a different status across languages, being conventional in languages in which the apprehensive marker takes two arguments (i.e. does not have pure matrix occurrences), and to be derived, pragmatically or as a matter of discourse structure, in language like Hebrew, in which the the apprehensive marker is, semantically, a modal with one propositional argument.

The paper also proposes that there is a class of temporal additive markers that have what I called a *boding* interpretation, Hebrew additive *od* and German *noch* being instances. Boding additives are future-oriented additives that carry the presupposition that their future-referring prejacent does not hold to be neither the case nor a historical necessity (i.e. true in all possible futures) at utterance time

will become a historical necessity at some future point (and hence, by entailment, will someday be true).

Finally, the paper suggested that Modern Hebrew has, or perhaps is coming to have, a morphologically complex apprehensive complementizer, fusing a subordinating complementizer with negation. This hypothesized complementizer functions in some ways like the obsolete Biblical complementizer *pen*, and finds a close parallel in Hungarian and in the Slavic languages, but overall, the plausibility of such a complementizer, and its putative relation to the broader landscape of apprehensive marking, remain rather murky.

Abbreviations

I use the following abbreviations: ACC = accusative, ALL = allative, cs = construct state, IMP = imperative, NEG = negation, Q = question particle, 1MPL = 1st person, masculine, plural and so forth for other person/gender/number combinations.

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