

Codifying apparent inconsistencies in discourse

The case of Hebrew *ma*

Yael Ziv

In this paper I examine the Modern Hebrew discourse marker *ma* the function of which is to help anchor new information into the discourse when it appears that the newly introduced material is inconsistent with information assumed to be already in the addressee's knowledge store. I claim that *ma* is used to acknowledge and possibly rectify such incompatibilities at the service of coherence and consistency. I briefly discuss yet another discourse marker used to preserve coherence (*staam*), showing that it constitutes an instruction to the hearer to delete material from the discourse model in the face of a sharp contradiction between its content and information taken to be shared.

1. Introduction

Understanding the factors underlying the construction of models of ongoing discourse has been a challenge within a variety of theoretical frameworks. It is clear, however, that whatever the model, ongoing discourse cannot be conceived of as a simple augmentation of information units. Observations have been made that a chain of new, unexpected and unrelated pieces of information might be hard to process and interpret and the fact that such text types were detected in the speech of schizophrenic patients, where communication failures abound, constitutes support for this view (*cf.* Reinhart 1980: 164). It has thus been proposed that for a text to be well-formed it has to be coherent, where this concept is determined by parameters such as linking and consistency (*cf.* Reinhart *ibid.*).¹ In conceiving of a discourse model, then, we would have to come up with suggestions for the integration of newly introduced material which would demonstrate the required links to those pieces of information assumed to be already within the addressee's knowledge store. The so-called new material, in turn, would be subject to consistency constraints, defined in terms of truth "in the same state of affairs", at the service of the overall coherence

1. For a somewhat different conception of Coherence *cf.* Halliday & Hasan 1976.

of the discourse segment in question (*cf.* Reinhart *ibid.*). A major assumption in this context is that speakers make educated guesses on the basis of what they take to be common background or shared knowledge in addition to constant monitoring of states-of-knowledge attributed to the interlocutors at any given point in the discourse.² It would appear then that newly introduced material which is surprising and stands in some conflict with information taken to be “given” or inferable (*cf.* Prince 1981) will not abide by the consistency constraint and hence will fail to demonstrate the necessary coherence. In this study I would like to discuss linguistic manifestations of anchoring incoming material into the discourse in cases where inconsistencies are apparent between newly introduced material and information assumed to be already in the addressee’s Knowledge Store or inferable on the basis of information the speaker assumes to be accessible to the addressee. Specifically, a lexical marker in Modern Hebrew is examined the function of which is to acknowledge (and possibly rectify) such incompatibilities at the service of consistency.

2. Discourse markers

Instructions for processing ongoing discourse, discourse segmentation devices, topic shifters, turn takers, attitudinal markers and hedging devices are among the entities classified under the subject of *Discourse Markers*, also referred to as *Discourse Particles*, *Pragmatic Markers* or *Pragmatic Particles*. These have been analyzed within a range of theoretical orientations (*cf. e.g.*, Abraham 1991; Blakemore 1987, 2004 and Jucker & Ziv 1998). It should be noted that it is not even clear that the different items form a single class. It may turn out to be the case that there are several classes sharing certain characteristic features or that being a member of this class is a matter of degree whereby more prototypical members display more of the relevant properties than those which are less prototypical (*cf.* Rosch 1973). I will not elaborate here on the various analyses nor will I take a stand on the issue of classhood, rather I will concentrate on the major features attributed to the items under consideration and shared by most of the approaches.

2. A variety of terms has been used in the relevant literature to refer to this type of information. Among these are *Common Background*, *Common Ground*, *Shared Knowledge* and *Mutual Knowledge*. Factors attributed to this type of information abound within a range of theoretical approaches. For a partial list underlying many of the more recent treatments *cf. e.g.*, Firbas (1971) with respect to word order, Clark & Marshall (1981) in the context of definite reference, Prince’s (1981) taxonomy of given – new information, Givón’s (1987) survey of coherence factors and Ariel’s (1990) theory of NP accessibility.

Phonologically: They form a distinct tone unit, or “[are] prosodically detached from the rest of the sentence”, to use Mittwoch, Huddleston and Collins’ (2002: 666) phrasing in the context of supplements.

Syntactically: They are external to the sentence or “less tightly integrated into the structure of the containing clause” (*ibid.*) and thus fail to appear as the informational focus in structures like *it* clefts, polar interrogatives or negatives.

Semantically: They have “little or no propositional content” (Brinton 1996: 33–35) and do not affect truth conditions (Hölker 1991: 78–79).

Pragmatically: They have an emotive rather than a referential function (Hölker *ibid.*).

Many approaches also mention their sociolinguistic property: they are associated with informal speech and hence are stigmatized (Brinton *ibid.*).

The phonological, syntactic and semantic characterizations specified above indeed suggest that discourse markers (hence DM) do not form an integral part of the sentence but rather are in some sense external to it. In addition, the items in question have been characterized as functioning meta-linguistically. It could alternatively be suggested that they are functional at the meta-discourse level.³ They may, thus, be conceived of in terms of text organization and in terms of semantic content. Under the organizational properties is classified the role they play marking pieces of information with respect to their text status, where parameters such as position in the on-going discourse, end of a discourse segment, the beginning of a new segment, topic shift and potentially others are relevant. Their semantic role subsumes such parameters as the extent to which the information in question is shared by the interlocutors and the speaker’s attitude to that which is conveyed, *inter alia*s. This is not to say that there are no explicit paraphrastic ways to achieve this variety of functions. So, for example, we may say something like: (a) I would like to change the topic now; or (b) This is the beginning of a segment. However, the DMs in question are conventionally associated with these functions.

3. *ma*

3.1 *ma* as a DM

As intimated above, it has been observed that more often than not newly introduced material is likely to be integrated into the overall discourse when it is

3. For a partial list of metalinguistic devices *cf. e.g.*, Quirk *et al.* (1985: 618–620).

anchored to pieces of information taken to be shared by the interlocutors at the relevant point in the discourse. Thus, when material is introduced which is judged by one of the interlocutors to be surprising and inconsistent with what is supposedly mutually shared, attention is drawn to this issue. In an attempt to resolve the apparent conflict, reference is made to Shared Knowledge (hence SK) as a reminder, or widening the reference point takes place to a set containing potential accommodations with respect to SK.⁴ As indicated above, this process is functional in the preservation of coherence. It is my contention that Hebrew *ma* “what” is a DM pointing out a potential inconsistency between incoming information and SK. In an attempt to resolve the inconsistency and arrive at coherence, *ma* may be used to draw attention to the fact that shared material has been forgotten or not realized, or that accommodation did not take place. *ma* may be uttered by the speaker (S) when in her judgment newly introduced material P may appear to the hearer (H) to be unlikely, surprising, incompatible or inconsistent with what he takes to be true, ~P. Its function is to point out the SK or accommodations thereof, which H was probably unaware of or just forgot, which would lend credulity to P. It would follow then that upon closer inspection P is consistent with SK. *ma* can also be utilized by S when H says or does something (~P) which appears to S to be inconsistent with what she takes to be SK and from which it follows that P. In an effort to resolve the inconsistency, then, mention is made of SK which H apparently did not remember, or was unaware of, when he uttered or did ~P, or when an expected accommodation from which P follows did not take place. As a result of this move consistency is presumably achieved (cf. discussion of example (1) following).

In the cases described above, then, *ma* is used by S to preserve consistency in the face of apparent violations thereof in view of SK and accommodations with respect to it, at the service of discourse segment coherence. The following examples (to be discussed in 3.3) display instances of *ma* as a DM:

- (1) *Kol šana hi nosa'at le-xofeš bli ha-ba'al*
 every year she go.FEM.SG to-vacation without the-husband
ve- ha-yeladim.
 and-the-kids
 ‘Every year she goes on vacation without the husband and the kids.’

4. cf. in this context Heim's (1982) conception of accommodation as “Context Change Potential” and Atlas' (2004: 36) characterization as “repair of the alleged infelicity”. I will be using *accommodation* here in a sense extending Heim's Context Change Potential and the consequent repair of potential infelicity.

Ma lax lo ba lifamim liyot levad?
 ma to.you.FEM.SG not come sometimes to.be alone
 ‘Ma, don't you feel like being alone sometimes?’

[adapted from D. Grossman's Novel: *Baguf Ani Mevina* (English Title: *In another Life*) 2002: 43]

I will be using *ma* in the English renditions, since it, rather than English *what*, is examined here (but see 5.4 where English equivalents are discussed). Likewise, I will use the English equivalents relatively loosely where it is not crucial for the issues under discussion, in order to concentrate on the main points and facilitate comprehensibility.

- (2) *Zehava metapelet ba-nexda axšav.*
 Zehava taking.care.FEM.SG in.the-granddaughter now
 ‘Zehava is taking care of her granddaughter now.’

Ha – bat šela pitra et ha-metapelet.
 the-daughter her fired.FEM.SG ACC the-nurse
 ‘Her daughter fired the nurse.’

Ma ze mamaš mafxid ma še-yaxol likrot. (2nd *ma* relative)
 ma it really frightening what that-can happen
 ‘Ma it is really frightening what can happen.’

Uttered in a conversation between two friends following a scandal in which a nurse hit twin babies under her care.
 and:

- (3) 27 year old Mali from Tel Aviv talks about her grandmother who had a miserable marriage life and says that she had been surrounded by a host of aristocrats who courted her in Tunisia.

Ve-ha-xayim šela hayu formidabl (sic.)
 and-the-life her were terrific (colloquial French)
 ‘And her life was terrific.’

Ma hi hayta be'emet malka, ba -tmunot.
 ma she was.FEM.SG really queen in.the-pictures
 ‘Ma she was a real a queen, in the pictures.’

[Y. Ben-Ner *ir miklat* (English title: *City of Shelter*) 2000: 29]

3.2 DM and WH *ma*

Before we examine the relevant instances of *ma* as a DM, it is necessary to distinguish them from the WH interrogative marker *ma* in Hebrew.

Unlike information (variable) interrogatives in which *ma* is the WH element, as in:

- (4) *Ma hi ra'ata?*
 what she saw.FEM.SG
 'What did she see?'

in (1) above DM *ma* co-occurs with a polar (Y/N) interrogative and in (2) with a declarative sentence. The intonation pattern of the two is different: DM *ma* in (1)–(3) constitutes a separate intonation unit, unlike the intonation pattern evident in the case of WH interrogative, where *ma* constitutes an integral part of the intonation unit of the sentence in which it occurs. An additional distinction between the interrogative *ma* and the DM under discussion is the embeddability potential. WH *ma*, but not DM *ma*, may be embedded. The following sentences in (5)–(8) provide evidence for this difference. In sentences (5) and (6) *ma* functions as an instance of embedded WH in the interrogative, and the sentences are well-formed:

- (5) *Hi ša'ala oti ma ani xoševet.*
 she asked.FEM.SG me what I think FEM.SG.
 'She asked me what I think.'
- (6) *Hem racu lada'at ma osim be-mikre kaze.*
 they wanted.PL to.know what do.MASC.PL in-case such
 'They wanted to know what one does in such a case.'

In (7) and (8), however, DM *ma* functions as an embedded DM and the sentences are ill-formed.

- (7) **Hu ša'al ma lax lo ba lifamim liyot levad?*
 he asked.MAS.SG ma to.you.FEM.SG not come sometimes to.be alone
 'He asked *ma* you do not feel like being alone sometimes?'
- (8) **Hi racta lada'at ma ze mamaš mafxid*
 she wanted.FEM to.know ma it really frightening
ma še -yaxol likrot. (2nd *ma* head of relative clause.)
 what that-can happen
 'She wanted to know *ma* it is really frightening what can happen.'

Note that (7) above can only be accepted as an instance of direct speech, as in (7') which is clearly not an instance of subordination.

- (7') *Hu ša'al: 'ma, lax lo ba lifamim liyot levad?'*
 he asked: 'ma to.you.FEM.SG not come sometimes to.be alone
 'He asked: 'ma Don't you feel like being alone sometimes?'

3.3 *ma* an analysis

Let us examine instances of DM *ma* as in (1)–(3) above more closely now. In (1) S believes or suspects that H will consider the story about the woman going on vacation alone (without her husband and the kids) inconsistent with or unlikely in light of what she takes to be SK, *i.e.*, stereotypes of women's roles in the traditional family. In order to make the story credible and resolve the apparent inconsistency, S instructs H to accommodate the contextual assumptions by introducing to SK basic understanding of human nature where some rest is a valuable commodity. On the basis of this extended context, S hopes, H will realize that no inconsistency is involved in the case at hand. The instruction to resort to accommodation is codified here by the use of a rhetorical question comprised of DM *ma* and a polar interrogative (*i.e.*, *ma* Wouldn't you like to be alone sometimes without the husband and the kids?). In (2) the *ma* clause is used by S as a justification of the state-of-affairs P, *i.e.*, Zehava's daughter firing the nurse and Zehava's taking care of her granddaughter, described in the previous text. Anticipating H's amazement resulting from her judgment that P cannot occur (or that ~P is the case), S justifies P by reminding H that there is solid rationale for P. S refers H back to SK, which includes information H has apparently forgotten: the story about the nurse who mistreated the babies under her care. Accommodation here consists in extending the context (SK) based on Zehava's normal conduct in an attempt to "repair the alleged infelicity" attributed by H to P, by reference to the nurse incident. As a consequence, S expects H to regard P as credible, and thus not to display inconsistency with SK. Let us examine some more cases.

The following example is taken from Y. Ben Ner's book *ir miklat* (City of Refuge) (2000: 46) the section on 27 years old Mali who is single and tells her life-story. In the relevant section she recounts being released from military service on psychiatric grounds and says that she was ready to go to bed with anybody who was willing to pay attention to her. Upon realizing that this may sound unrealistic, she says:

- (9) *Ma kol mi še -lo histakel alay kmo dfuka*
 ma every who that not looked.MAS.SG on.me like fucked FEM.SG
ba-roš haya bišvili maš'ax zidkenu.
 in.the-head was for.me Messiah righteous.our
 'Ma every person who did not look upon me as crazy was the Messiah for me.'

thus reducing the incredulity factor. Here, just as above, what looks surprising or incredible (willingness to go to bed with anybody on a non-selective basis) becomes credible in light of Mali's explanation. In such examples too, *ma* can be regarded as fulfilling a role in the construction of a coherent discourse model. *ma*

may be construed as an instruction to update the discourse in cases where newly introduced material appears incompatible with what is presumably SK, in light of the clarifications provided.

Yet another manifestation of the use of *ma* as a DM in Ben-Ner's book is evident in the section on Eitan Shefi, a 46 years old Security Advisor. Shefi talks about a violent incident which he witnessed as a child and which he was the only person willing to give testimony of (2000: 113).

- (10) 'Al deateft atflux ve-sof metayfayix yetufun'.

This Aramaic quote is taken from the Jewish prayer book (chapter 2 of *Pirkey Avot*) and has been subject to several interpretations, one of which is:

'Every sinner will be punished.'

Ma, ha-pasuk ha-ze lo nimxak li me-ha-zikaron.
 ma the-verse the-this not get.erased to.me from-the-memory
 'Ma this verse cannot be erased from my memory.'

Shefi mentions that a note with that quote on it was put in his mailbox after he had testified. In this example then, given Shefi's background, it is highly unlikely that he could come up with this quote. The oddity which is associated with the quote from the prayer book by Shefi is explained away by the following clause: The verse cannot be erased from my memory (*i.e.*, I can never forget this saying). The second clause with *ma* provides support for it being non-surprising, in light of the larger context. Going back to (3) now, repeated here:

- (3) *Ve-ha-xayim šela hayu 'formidabl' (sic.)*
 and-the-life her were terrific
 'And her life was terrific'.
ma hi hayta be'emet malka, ba-tmunot.
 ma she was.FEM.SG really queen in.the-pictures
 'Ma she was like a queen, in the pictures.'

(Ben-Ner: 2000: 29)

Such examples too indicate that *ma* can be regarded as fulfilling a role in the construction of coherent discourse model. *ma* may be construed as an instruction to update the discourse in cases where newly introduced material appears incompatible with what is presumably SK, in light of the clarifications provided.

The following example appears to be slightly more complicated.

Upon her child's refusal to eat a mother can utter:

- (11) *Ma ata lo roce liyot gadol ve-xazak kmo aba?*
 ma you not want.MAS.SG to.be big and-strong like father
 'Ma don't you want to be big and strong like Daddy?'

(Adapted from an anonymous reviewer in a different context)

Note that *ma* co-occurs with the negative *ata lo roce* ("you do not want"). Since negatives are known to presuppose the corresponding affirmatives (*cf.* Givón 1978 and Horn 1989), the presupposition here is that the child desires to be *gadol vexazak kmo aba* ("big and strong like his father") and so his refusal to eat appears to stand in conflict with what is presupposed or even known for a fact. The use of *ma* functions to point out this conflict in an attempt to achieve the consistency required for the establishment of a coherent discourse.⁵ *ma* necessarily relates the existing state-of-affairs (child's behavior) to what is taken to be true by virtue of SK. Without *ma* no explicit mention of the SK need exist; it could just be an instance of a true polar interrogative (*cf.* 5.1 following). Note, incidentally, that a bi-conditional presupposition underlies this argumentation pattern. Specifically, the claim is implied that eating is the only way to achieve growth. This comes about by so-called *conditional completion* whereby conditionals are interpreted as bi-conditionals (*cf.* Geis & Zwicky 1971). Examine the truth table values for both:

Conditional	Bi-conditional
$E(at) \supset G(row) T$	$E(at) \supset G(row) T$
$\sim E \supset \sim G T$	$\sim E \supset \sim G T$
$\sim E \supset G T$	$\sim E \supset G F$
$E \supset \sim G F$	$E \supset \sim G F$

The mother utilizes an erroneous inference pattern (attributed to the child) where conditionals are interpreted as bi-conditionals, specifically: $\sim E \supset G$ is assigned the truth value F rather than T, suggesting that: $G \text{ iff } E$.

Yet another interesting example where *ma* is used to point out surprise or inconsistency between an expected state-of-affairs and the current situation is evident in the following situational trigger:

- (12) *Ma eyn oxel?*
 ma exist.not food
 'Ma there's no food?'

This can be uttered when the fact that there is no food appears to stand in conflict with an expected state-of-affairs (or a presupposition) that there be food. Note that here, as in (11), a negative is used: *eyn* ("exist not"), thus presupposing the corresponding affirmative and here too the trigger is non-linguistic (*cf.* footnote 5). As a possible context we may conceive of a situation when a child comes home

5. Note that *discourse* need not necessarily be verbal but rather is perceived within a wider perspective to include SK and surrounding circumstances. *ma* here is triggered by situational context. The DM *harey* (discussed in 5.2.), by contrast, seems to be restricted to verbal triggers.

- (14) S: *Raciti lir'ot otxa ba-mesiba.*
 wanted 1.SG to. see you. MASC.SG in.the-party.
 'I wanted to see you at the party.'
- H: a. *Ma, amarti lexa še-yeš li hamon avoda.*
 ma told 1.SG to.you.MASC.SG that-exist to.me lot work
 'Ma I told you that I have a lot of work (to do).'
- H: b. *Aval amarti lexa še-yeš li hamon avoda.*
 but told 1.SG to.you.MASC.SG that-exist to.me lot work
 'But I told you that I have a lot of work (to do).'

Let us examine these issues in some depth now.

5. Some answers

Before we address the question of optionality, it is necessary to introduce an extension of the Gricean perception of context, which was proposed by Sperber and Wilson's (1986/1995) Relevance Theory (RT). Briefly, Grice's (1967) C(operative) P(rinciple) with its 4 maxims: Quality, Quantity, Relation and Manner is supposed to supply the parameters for interpretation in cases where non-literal meaning is criterial in a given context. RT, by contrast, considers context as dynamic and assigns *relevance* the primary function in the search of the most appropriate context against which a given utterance is to be interpreted (*cf.* Sperber & Wilson 1986/1995; Blakemore 1987, 1989, 2001, 2002, 2004 and Carston 1993, 1998, 1999 and 2002 for some references to RT and its applications). Within the framework of RT a distinction has been proposed between *conceptual* and *procedural* meaning which partially overlaps with distinctions introduced elsewhere between *representational* and *computational* and *truth-conditional* vs. *non truth-conditional* meanings (*e.g.*, Blakemore 1987, 2004 and Recanati 1986, 1995, 2002, 2004, *inter alia*). Underlying this distinction is the perception that different types of information are encoded linguistically. Specifically, conceptual meaning is associated with propositional, truth-conditional meaning, whereas procedural meaning is conceived of as a non truth-conditional set of instructions for interpretation or, alternatively, constraints on the relevant inferential processes (*cf.* Blakemore 2004).

5.1 Non optionality

Given this brief theoretical background, we can now re-examine the claim concerning the optionality of *ma*. Let us consider the distinction between (1) and (1'), (2) and (2'), (3) and (3') and (15) and (15'). Underlying the claim concerning the optionality of *ma* is the assumption that it does not contribute anything to the sentence. If we

look closely, we will find that (1') may be interpreted as a sincere question in the context (*i.e.*, She did X, wouldn't you like to do that as well?) and not necessarily as an instance of a rhetorical question used with an epistemic bias (*cf.* Huddleston 2002) to argue that there is no incompatibility between the two segments at hand. The non-rhetorical reading is much less likely in (1). *ma* thus can be argued to constrain the potential readings and to favor one reading over the other (*cf.* Blakemore 1987). It appears to specify a necessary relation between the segments in question. (Note that in such cases the type of relation may be pragmatically determined, *e.g.*, cause and result and logical inference.) The examples in (2) demonstrate a similar property. The most likely interpretation of (2) suggest that the nurse incident constitutes the reason for Zehava's taking care of her granddaughter. In (2') (without *ma*) however, although a similar interpretation is possible, an alternative interpretation is available (if not preferable). Here, the nurse incident need not count as the relevant background. Rather, Zehava's taking care of her granddaughter might be dangerous or frightening irrespective of the nurse incident (*e.g.*, because Zehava is known to be absent-minded, epileptic or possess some other attribute which would make her unfit for this job). This is due to the open-endedness of the relation between adjacent segments in discourse, subject to Gricean relevance considerations. The difference thus lies mainly in the *ma* segments being necessarily based on SK and triggered by verbal or nonverbal stimuli, while no such restriction is imposed on the *ma*-less versions. The clauses in question could simply count as continuations.

Two more illustrations are evident in (3) and (3'). and (15) and (15'). Compare the relevant part of (3) (repeated here) and (3') following:

- (3) Mali about her grandmother's past in Tunisia, where she had aristocrats
 courting her:
Ve-ha-xayim šela hayu 'formidabl'. ma hi hayta be'emet
 and-the-life her were terrific ma she was really
malka, ba-tmunot.
 queen, in.the-pictures
 'And her life was terrific. ma she was like a queen, in the pictures.'

vs.

- (3') *Ve-ha-xayim šela hayu 'formidabl' hi hayta be'emet*
 and-the-life her were terrific She was really
malka, ba-tmunot.
 queen in.the-pictures
 'And her life was terrific. She was like a queen in the pictures.'

In (3) the *ma* phrase is used to provide evidence to that which seems incredible given her present misery, that she had a terrific life in Tunisia. The pictures constitute

the evidence. In (3'), on the other hand, the second clause goes on describing life in Tunisia, providing the description "she was a real queen".

The last example in this context is evident in (15):

- (15) *Ma ani roca lalexet le.seret.*
 ma I want FEM.SG to.go to-movie
 'Ma I want to go to a movie.'

vs.

- (15') *Ani roca lalexet le.seret.*
 I want FEM.SG to.go to-movie
 'I want to go to the movies.'

(15) may only occur in a context where there is an immediately preceding trigger (situational or verbal), for example, when S is asked why she is in a hurry, or when it seems to H that S is in a hurry. *ma* suggests that there is a rationale for S's behavior, and it is not surprising at all: she just wants to go to the movies. (15'), however, is not restricted in the same way. It could simply be an expression of a desire to go to the movies with no immediately preceding trigger. It could open a speech situation, for example, when functioning as a request. The same is not true of (15). One context which brings out the difference might be an answer to the following question:

(15'') S: What do you want to do this afternoon?

- (15) H: *Ma ani roca lalexet le.seret*
 ma I want.FEM.SG to.go to-movie
 'Ma I want to go to the movies.'

vs.

- (15') H: *Ani roca lalexet le-seret.*
 I want.FEM.SG to.go to-movie
 'I want to go to the movies.'

For (15) to be acceptable here we must assume that there is some presupposition that H ought to have known that this is the case, that S wanted to go to the movies. Without previous contextual assumptions (15) seems weird (*cf.* discussion of *harey* in 5.2). (15'), however, is well-formed in this context with no presupposition or expectations. Extending Grosz and Sidner's (1986, *in te alia*) sense of the backward and forward looking centers (Cb and Cf, respectively) and applying them in the cases under consideration, we may express the difference in interpretation such that in the *ma* versions the clause in question has a Cb orientation (*i.e.*, related to previous material) whereas in the *ma*-less version it tends to have a Cf orientation (*i.e.*, anticipating the following material) and can occur in discourse initial position.

Applied to (15), it can account for the distinction in orientation such that (15) may only refer to some previous material whether explicitly expressed or presupposed, while (15') can occur discourse initially anticipating the incoming material.

Recasting these findings in RT terms, we could say that *ma* seeks for the context which would show optimal relevance bearing the resolution of inconsistency, by introducing SK or accommodations thereof (as in examples 2 and 3 and in a somewhat more sophisticated case in example 11, for instance). On the other hand, (2'), (3') and (15') would carry no such specific instruction and the search for optimal relevance would then be considerably more open-ended. Through the peephole of the Gricean CP, we could say that the use of *ma* follows from one of three maxims: Quantity, Quality or even Relation. This state-of-affairs follows from the open-endedness of the characterizations of the different maxims and the consequent difficulties in their application (*cf. e.g.*, Horn 1989; Kasher 1976, 1982; Levinson 2002 and Ziv 1988 and references therein). Thus, if we attribute the occurrence of *ma* to the Quantity maxim, we are stressing the aspect where information which is accessible already is nevertheless non-redundant, since it serves a distinct discourse function. If we try to derive the conditions responsible for the occurrence of *ma* via Quality, what becomes significant is the desire not to supply information for which evidence is lacking, information which is unsubstantiable. In this case information is added as the substantiation of the claim P. The maxim of Relevance could easily be referred to in this case as well, since *ma* in fact specifies the nature of the relationship between the two apparently conflicting pieces of information by reference to the appropriate context.

5.2 *harey*

The second issue that merits discussion at this point is the relationship between *ma* and *harey* ("after all"). According to Ariel (1985, 1988, 1998), there are two types of *harey*, one attached to a matrix clause and occurring in clause initial position when the clause itself is non-initial, the other, Low Accessibility *harey*, is not restricted to clause initial position and, like adverbials, can occur in several positions in the clause (*cf.* Ariel 1990 for the relevant conception of accessibility). In discussing the two types of *harey* Ariel makes use of Erteschik-Shir and Lapin's (1979) notion of *Dominance*, whereby Dominant material is defined in terms of the constituent to which the speaker wishes to draw the attention of the addressee and which serves as a natural candidate for being the topic of the next sentence. (In the Grosz and Sidner model this would be the forward looking center Cf, in the extended sense discussed above.) Applying this distinction, Ariel attributes the property *Dominant* to the matrix *harey*, the one occurring in initial position in the non-initial clause and the other *harey* she regards as *non-dominant*. As examples

of the two types she quotes the following sentences, where (16) demonstrates the Dominant *harey* and (17) the non-dominant item.

- (16) *Im eyn hem muxanim levater be-inyan ko paut, harey*
 if exist.not they willing to.give.in in-a.matter so small harey
ani vaday patur mi -viturim.
 I certainly exempt.MASC.SG from concessions
 'If they are not willing to give in in such a small matter,
 I certainly do not have to.' (Kouzar 1980; his 2, in Ariel 1988: 573 her 4a)

- (17) *Ha-dor šelanu lo yada od be-ofen mamaši*
 the-generation our not knew yet in a-manner real
ma-hi milxama
 what.is war.

Harey be-mivtsa sinai hayinu kimat yeladim
 harey in Campaign Sinai were.1.PL almost children

'Our generation did not know yet in a real sense what war is. After all,
 in the Sinai campaign we were almost children.'

[*si'ax lochamim* (i.e., Warriors' discourse) p. 27, in Ariel 1988: 574 her 5a]

Examining the examples above it is clear that, neglecting the obvious register distinctions, *ma* can replace *harey* in the non-Dominant instantiation in (17), as in (17') below:

- (17') *Ha-dor šelanu lo yada od be-ofen mamaši*
 the-generation our not knew yet in-a-manner real
ma-hi milxama
 what.is war.

Ma be- mivtsa sinai hayinu kimat yeladim.
 ma in Campaign Sinai were.1.PL almost children

'Our generation did not know yet what war is in a real sense.
 ma in the Sinai campaign we were almost kids.'

The case of Dominant *harey* is somewhat more problematic. The ill-formedness of (16') following, where *ma* replaces Dominant *harey*, suggests that there is no corresponding Dominant *ma*,

- (16') **Im eyn hem muxanim levater be-inyen ko paut,*
 if exist.not they willing to.give.in in-a.matter so small,
ma ani vaday patur mi- viturim.
 ma I certainly exempt.MASC.SG from concessions.
 'Ma if they are not willing to give in in such a small matter,
 I certainly do not have to.'

However, it seems that here the differences in register are significant. Dominant *harey* occurs characteristically in the literary style, whereas *ma* is strictly colloquial. If we examine an example sentence that does not wear its register so openly on its sleeves such as (18), we will find that the two may in fact be interchangeable in this use as well.

- (18) *Im hi lo ba'a la-azor lo, harey (še) ani betax lo avo.*
 if she not come to-help him, harey (that) I clearly not come.FUT
 'If she doesn't come to help him, then I certainly won't come.'

- (18') *im hi lo ba'a la-zor lo, ma, ani betax lo avo.*
 if she not come to- help him, ma I clearly not come.FUT
 'If she doesn't come to help him, then I certainly won't.'

For present purposes then, we are concerned with the non-Dominant *harey*, the one that appears to be interchangeable with *ma* as in (13b) and (13a) respectively. These are repeated here for convenience:

- (13) a. *ma kol-exad yode'a et ha-emet,*
 ma every-one know.MASC.SG ACC the-truth,
az lama hi ma'amida.panim še -ha-kol beseder?
 so why she pretends that the.all O.K.
 'ma everyone knows the truth, so why does she pretend
 that everything is O.K.?'
 (13) b. *harey kol-exad yode'a et ha-emet,*
harey (after all) every-one know.MASC.SG ACC the-truth,
az lama hi ma'amida.panim še-ha-kol beseder?
 so why she pretend.FEM.SG that-the-all O.K.
 'After all, everyone knows the truth, so why does she pretend that
 everything is O.K.?'
 (13) b'. *Kol-exad harey yode'a et ha-emet.*
 every-one harey know.MASC.SG ACC the-truth.
 b''. *Kol exad yode'a et ha-emet harey.*
 every one know. MASC.SG ACC the-truth harey.

Despite this seeming interchangeability there are significant differences between the two. In addition to the distinct conditions on their use (to be discussed below), they also demonstrate different distributional properties. Recall that Dominant *harey* is restricted to occurring in initial position in matrix sentences, when the clause itself is non-initial and non-Dominant *harey* is not restricted to a fixed position in the sentence. The non-Dominant *harey* may occur in positions that are characteristic of adverbials. This is evident in the following:

and even (13b'''), where *harey* occurs between the verb and the direct object:

- (13) b'''. *Kol-exad yode'a harey et ha-emet.*
every-one know.MASC.SG *harey* ACC the-truth,

ma, however, does not demonstrate the same distributional freedom and hence the ill-formedness of the following:

- (13) a'. **Kol -exad ma yode'a et ha-emet.*
every -one *ma* know.MASC.SG ACC the-truth

or:

- (13) a''. **Kol-exad yode'a et ha-emet ma.*
every-one know MASC.SG ACC the-truth *ma*
- (13') a'''. **Kol. exad yode'a ma et ha-emet.*
everyone know.MASC.SG *ma* ACC the-truth

Thus, *ma*, but not non-dominant *harey*, is restricted to clause initial position. It is interesting to note here that in this respect *ma* shows the property associated with Dominant *harey*.

An additional distributional distinction is evident in that *ma*, but not *harey*, can occur in a polar interrogative [cf. (1) above and repeated here]:

- (1) *Kol šana hi nosa'at le-xofeš bli ha-ba'al*
every year she go.FEM.SG to vacation without the-husband
ve-ha-yeladim.
and-the-kids
- a. *Ma lax lo ba lifamim liyot levad?*
ma to.you.FEM.SG not come sometimes to.be alone
'Ma don't you feel like being alone sometimes?'
- b. **Harey lax lo ba lifamim liyot levad?*⁶
after.all to.you.FEM.SG not come sometimes to.be alone?
'After all, don't you feel like being alone sometimes?'

6. Note that the non-interrogative sentence:

Harey lax lo ba lifamim liyot levad
after.all to.you.FEM.SG not come sometimes to.be alone
bli ha-ba'al ve-ha-yeladim.
without the-husband and-the-kids

'After all, you do not feel like sometimes being alone without the husband and the kids.' is well-formed, but as is expected, it is constrained by different parameters.

Intonationally the two differ too in that *ma* but not *harey* constitutes an independent intonation unit. Note that this is true for both the Dominant and the non-Dominant *harey*; in both cases *harey* constitutes part of the intonational clause that immediately follows it.

The conditions which determine their respective use vary. Ariel (1988) convincingly argues that non-Dominant *harey* can only co-occur with information that the speaker takes to be already accessible to the addressee. This information is then perceived as SK. This property renders *harey* suitable for the illocutionary force *reminder*.⁷ *ma*, on the other hand, is not thus restricted. Like *harey* it may be used by S to refer to accessible information SK, however, unlike *harey*, it may be used to draw H's attention to the need to accommodate SK or to introduce information that can be reasonably inferred from it. These differences become evident by comparing the two in contexts such as the following:

Ruth who is a close friend of Jay invites her over. In the middle of the social gathering Jay utters:

- (19) I am sorry I have to leave in the middle.
a. ?*harey* I have a headache. (Adapted from Ariel 1998: 231 her 7)

harey, indicates that the host already had the information available (hence it is part of SK). This is clearly counter intuitive in the context under consideration.⁸ However, under the same circumstances

- b. *Ma* I have a headache.

is judged as acceptable. It provides the rationale instructing Ruth, the hostess, to accommodate her SK, on the basis of her acquaintance with Jay, who would presumably not leave otherwise. Hence, *ma* need not suggest that H should have known about S's headache.

Yet another example of this distinction is supplied in (20). This is an instance of a non literal, situational context, where surprise is a relevant parameter:

S and H are good friends. Upon H's doing something that S would like to do as well (e.g., go to the movies) and in the face of H's not asking her to join in S may utter:

- (20) a. *Ma, gam ani roca lalexet le.seret,*
ma too I want.FEM.SG to.go to-movie
'I also want to go to the movies.'

7. Note that the act of reminding could be real or manipulative (cf. discussion following).

8. Ariel claims that the *harey* attached to a non-Dominant clause is used mostly to motivate or support, though it may also introduce contrast (cf. Ariel 1988: 573). In the case at hand the fact that it is not shared makes it impossible to use as a justification.

S points out the apparent lack of consistency between H's move and what would be expected in such cases given SK (they are friends) and the relevant accommodation and inferences based on Knowledge of the World (hence KoW) (e.g., what friendship involves). This is done in the hope that it be reconciled. The version in (b) however, with *harey* as in:

- (20) b. *Harey, gam ani roca lalexet le.seret.*
 after.all(*harey*) too I want.FEM.SG to.go to-movie
 'After all I also want to go to the movies.'

may occur when it is clear that S reminds H of SK, i.e., that H should have known that S wanted to join in and go to the movies. No accommodation need take place; it is a sheer reminder. It is highly likely that (20b) is uttered after S and H have discussed it earlier and it should have been shared by both.⁹

Most revealing are cases where *ma* and *harey* may co-occur non-redundantly as in:

- (20) c. *Ma, harey gam ani roca lalexet le.seret.*
 ma harey too I want.FEM.SG. to.go to-movie
 'Ma (*harey*) after.all I also want to go to the movies.'

This clearly suggests that the two do not fulfill the same function. *harey* is used to point out a symmetry between S and H as to SK explicitly. *ma*, on the other hand, appears to constitute an instruction by S that H use this KS (with potential accommodations) to resolve an apparent inconsistency between an expected state-of-affairs and H's behavior in the case in question.

Examining cases such as (20c), where *ma* and *harey* co-occur, we realize that the order between the two is fixed, *ma* must precede *harey*. This is evident from the ill-formedness of (20d) as compared with the well-formed (20c).

- (20) d. **Harey ma, gam ani roca lalexet le.seret.*
harey ma too I want.FEM.SG to.go to-movie
 'After.all (*harey*) *ma* I also want to go to the movies.'

Recall the constraints on their position in the clause (cf. the sentences in 13a and 13b above): *ma* is constrained to sentence initial position whereas *harey* is not thus restricted. Their co-occurrence would then necessarily have to show the *ma harey* order but will not be able to demonstrate the opposite order **harey ma*. Interestingly, the sequence of the English correlates: *what, after all* is acceptable, whereas

9. Note that (20a) is more natural than (20b) in cases where non-verbal triggers are involved.

the reversed order: **after all, what* is not.¹⁰ The ordering constraint between them appears to correlate with their distinct functions. *ma* provides the explanation for the apparent inconsistency on the basis of SK and not *vice versa*.

Ariel's characterization of *harey* (1988 *inter alia*) as a marker of low accessibility is consistent with this observation and may provide an explanation for it. Marking information as accessible is an explicit indication that it is part of SK. *harey*, then is used to point out a symmetry between S and H as to SK. *ma*, however, does not codify information as accessible to both H and S at the same time. Rather, it provides an instruction to H that SK ought to be accommodatable. This is functional in resolving potential inconsistencies. An alternative way of capturing the differences is by conceiving of them in terms of degree of accessibility. *harey* would count as a marker of information that is more accessible to H than *ma*, and hence need not be accommodated. The lower level of accessibility codified by *ma* would render it more likely to be in need of accommodation. The difference in grammatical properties, then, may be in correspondence with their distinct accessibility level.

Last, but not least, the relationship between the two could be conceived of as an intersection between two sets. Both may utilize accessible information, but whereas *harey* can only refer to such information, *ma* could also be used to indicate that inferred, accommodated information is required. It is, however, not the case that *harey* would constitute a proper sub-set of *ma*, since there are clearly cases where *ma* would make reference to information (inferred on the basis of KoW) which is not readily accessible.

5.3 but

The third issue that requires clarification is the apparent interchangeability of *ma* with *aval* the "denial of expectation" *but* as in (14). Unlike English, where the denial of expectation reading and the semantic contrast or opposition reading are codified by *but*, Hebrew codifies the two differently. *aval* stands for the *denial of expectation but* and *ela* stands for the so-called *contrast or semantic opposition but* (cf. Lakoff 1971; Dascal & Katriel 1977; Anscombe & Ducrot 1977 and Abraham 1979 *inter alia*). Similar distinctions occur in other languages as well. e.g., Spanish: *sino* and *pero* and German *aber* and *sondern*. In the case at hand we are dealing with *aval* the denial of expectation *but*.

10. Note that *halo* and *hen*, the literary Hebrew correlates of the accessibility marker *harey*, show the same distributional order constraint, when the register differences are neutralized. cf. also the discussion of English *what* as a DM in 5.4.

Looking closely at (14a) and (14b) above and repeated here for convenience, we realize that the shared feature between the two is the element of inconsistency. Thus in (14a) S takes H's behavior to be inconsistent with what she had expected and took to be SK, *i.e.*, that H will be at the party. H points out that the expectation was unwarranted and that there is in fact no inconsistency evident in H's behavior. This is done by reminding S of what H took to be SK *i.e.*, that H had told S that he had a considerable amount of work to do. In the context under discussion this conversationally implicates that H would not be able to attend the party. In (14b), S's expectation is explicitly denied or shown by H to be unrealistic in light of what H had told S before.

- (14) S: *Raciti lirot otxa ba-mesiba.*
 wanted.1.SG to.see you.MASC.SG in.the-party
 'I wanted to see you at the party.'
- H: a. *Ma, amarti lexa še- yeš li hamon avoda.*
 ma told.1.SG to.you.MASC.SG that exist to.me lot work
 'ma I told you that I have a lot of work (to do).'
- H: b. *Aval amarti lexa še- yeš li hamon avoda.*
 but told.1.SG to.you.MASC.SG that exist to.me lot work
 'But I told you that I have a lot of work (to do).'

There is a sense in which both *ma* and *aval* achieve the same communicative import by using different means. Their non-redundant co-occurrence as in (14c), however, will attest to the difference between them:

- c. *Ma aval amarti lexa še- yeš li hamon avoda.*
 ma but told.1.SG to.you.MASC.SG that exist to me lot work

but not:

- d. **Aval ma amarti lexa še- yeš li hamon avoda.*¹¹
 But ma told to.you.MASC.SG that exist to.me lot work

The order is restricted such that *ma* may precede *aval*, but not *vice versa*. Thus, *ma* which refers to SK (or accommodations thereof) can subsume the information in the *aval* clause by suggesting that there is no conflict, since the denial of expectation has already taken place *i.e.*, it is part of SK. *Ma*, then, acts as a reminder in such cases. The reversed order as in (14d), however, appears to demonstrate a conflict, such that *aval*, which indicates denial of expectation, suggest inconsistency between the state-of-affairs and the expectation at hand, while *ma* indicates that no

11. Note that *ma* is not a DM in the following sequence:

Aval ma amarti lexa?
 but what told.1.SG to.you.MASC.SG
 'But what did I tell you?'

inconsistency exists.¹² The intonation pattern too appears to be relevant in this co-occurrence pattern: thus, *aval* but not *ma*, is integrated within the sentence as one intonation unit (*cf.* the phonological features characterizing DM above). Hence, the sequence *ma aval* where *ma* constitutes a separate intonation unit followed by another whole intonation unit is well-formed, whereas the sequence **aval ma* is not. *ma* will break the intonational unity of the syntactic entity containing *aval* (*cf.* the co-occurrence constraints between *ma* and *harey* in 5.2).

The differences between *aval* and *ma* become evident in such cases as involve our so-called KoW which rest on cultural knowledge. Let us examine some cases now:

- (21) a. *Ron ašir aval hu lo meušar.*
 Ron rich, but he not happy
 'Ron is rich but he is not happy.'

The expectation that Ron be happy arises from the presupposition (based on stereotypical cultural codes) that being rich necessarily guarantees happiness. *Aval*, then, is associated with a concessive reading; it signals the denial of expectation, that is, Ron is rich, yet he is unhappy. Replacing *aval* with *ma* in the same context as in:

- (21) b. *??Ron ašir ma hu lo meušar.*
 Ron rich ma he not happy
 'Ron is rich ma he is not happy.'

to the extent that it is acceptable, would result in the understanding that this is an interchange between two speakers. This analysis, in turn, would be subject to two interpretations, one of which clashes with our so-called KoW. According to this reading, upon S's statement that Ron is rich as in:

- (21) b' S: *Ron ašir.*
 Ron rich
 'Ron is rich.'

H responds by

- H: *Ma hu lo meušar.*
 ma he not happy
 'Ma he is not happy.'

suggesting that Ron's being rich is not surprising, in light of his being unhappy. Underlying this argumentation is a conception of the world which is radically

12. It is interesting to note that the sequence *aval harey* is possible (*cf.* Ariel 1990: 233), a fact which provides yet another piece of evidence for the distinction between *ma* and *harey*. In addition, it appears that the sequence **harey aval* is ill-formed.

distinct from what is expressed by the version with the *aval* clause here. Thus, *aval* is associated with a concessive reading whereby rich people are usually happy and *ma* draws on a conception whereby being rich is concomitant with being unhappy. *Ma*, then, is used to indicate that there is no surprise in Ron's being rich.

Yet another reading is possible with the *ma* version, which is closer to the reading of *aval* in its social stereotypes (*i.e.*, that rich people are happy). This is evident in:

- (21) b". S: *Ron ašir.*
'Ron is rich.'
H: *Ma hu lo meušar.*
'ma he is not happy'.

where S's claim that Ron is rich is challenged by H, who suggests that it cannot be the case, since Ron is unhappy. Note that the version with *aval* could also occur in the same type of dialogue, where S's claim that Ron is rich is challenged by H. It is evident then that *aval* is only associated with a reading which challenges the implications arising from an immediately preceding statement. *ma*, however, can occur in instances where it either supports or rejects the proposition expressed by S in the utterance immediately preceding it, in order to resolve an apparent inconsistency.

An additional example is provided below:

Ron is known to be easy going and generally lazy. In this context S may utter

- (22) a.. S: *Ron oved kaše.*
Ron work hard
'Ron works hard.'

to which H would respond using:

- H: *Ma, hu roce la'lot be-darga.*
ma he want to go.up in degree
'He wants to be promoted.'

This would serve as the rationale for his working hard.

Ma, thus, specifies that this state-of-affairs is not surprising. Ron's working hard is a result of his desire to be promoted.

The use of *aval* as in:

- (22) b. *Ron oved kaše aval hu roce la'lot be-darga.*
Ron work hard aval(but) he want to go.up in degree
'Ron works hard, but he wants to be promoted.'

suggests that Ron's working hard contradicts his aspiration to be promoted. This seems to contrast with our KoW and is clearly distinct from (22a).

Following treatments of the conjunction *but* (e.g., Anscombe & Ducrot 1977 and 1989 and Winter & Rimon 1994) one could propose an analysis for *ma* (suggested by an anonymous reviewer in a different context). Briefly, the analysis proposed for *but* suggests that:

P *but* Q indicates that

P (accommodated with context) \supset R

$Q \supset \sim R$

Where Q is a stronger argument than P

The use of DM *ma*, then could be represented as:

P *ma* Q

C(context) $\supset \sim P$

C&Q \supset P

Or minimally: C&Q $\supset \sim (\sim P)$

neutralizing the effect of the negative assignment for P.

Applying such an analysis to a given speech situation we may assume that S describes a state-of-affairs P, which according to her assessment H would take to be false or incredible $\sim P$. In order to convince H that P is the case, S refers H to Q (a shared background event and potential inferences from it) from which P follows.

- (2') S: P (Zehava is taking care of her granddaughter now.
Her daughter fired the nurse.)
H: $\sim P$ (P is incredible; it cannot be true.)
S: P *ma* Q

where Q stands for the incident with the nurse and the inferences deriving from it, e.g., dangers that may result from employing such nurses.¹³

We have thus shown that our analysis of *ma* was not counter exemplified by the potential problems discussed above: *ma* appears not to be optional in all cases, the interchangeability with *harey* is partial and there are clear differences between them, and the same goes for its potential interchangeability with *aval*.

5.4 English equivalents

It is interesting to consider the occurrence in English of constructions with *what* and *why* which appear to function like DMs:

Consider the following:

- (23) a. What no dinner?

(Webster's New 20th Century Dictionary 1996: 2081)

13. Given that Q is known and taken to be true (even if forgotten at that point by H), this argument pattern could be conceived of as an instance of modes ponens:

$Q \supset P$

But: Q

Hence: P

appears to function as the counterpart of the Hebrew

- (12) *ma eyn oxel?*
 ma existential no food?
 ‘ma (what) there’s no food?’

Like its Hebrew counterpart, *what* may be uttered in a surprise situation where the presupposition that there be food is not realized. English *why* too can be used in expressing surprise or exclamation (cf. *Webster’s New 20th Century Dictionary* 1996: 2090) as in:

- (23) b. Why, are you crazy!

or:

- (23) c. Why what a day!

These are clearly not instances of WH (variable) interrogatives (cf. 3.2 above), as is evident from the distinct intonation pattern, *i.e.*, two intonation units in the DM case, but only one in the case of the adverbial interrogative. Likewise, their syntactic distribution is distinct: only DM *why* can co-occur with an exclamative sentence as in (23c), interrogative *why* cannot. Assuming there is no borrowing, it may be revealing that in both Hebrew and English the items that fulfil the interjection function, the ones expressing the surprise reading, are related to the items functioning in the WH interrogatives. The suggestion may be made that in both WH interrogatives and DMs, S assumes H possesses a piece of information. In the case of WH interrogatives, S requests that H provide the information, so that they will share it, in the case of the DM, however, S reminds H that she already possesses the information.

It appears then that the choice of these particular DMs is not arbitrary but rather follows from their semantics. It may be interesting to note in this context that in Hebrew too *lama* “why” can function as a DM. Its distribution, however, is not co-extensive with the English DM *why*. In some cases DM *lama* may be interchangeable with the Hebrew DM *ma* as in (24), which is a version of (1) with *lama* replacing *ma*, if in a different register.

- (24) *Kol šana hi nosa’at le-xofeš bli ha-ba’al*
 every year she go FEM.SG to vacation without the husband
ve-ha-yeladim.
 and the kids
 ‘Every year she goes on vacation without the husband and the kids.’
lama lax lo ba lifamim liyot levad?
 why to.you not come sometimes to.be alone
 ‘lama (Why), don’t you feel like being alone sometimes?’

However, as (25) below shows the two do not have the same distribution. DM *lama* cannot replace DM *ma* in the context evident in example (2). Compare: (2), repeated here, and (25):

- (2) *Zehava metapelet ba -nexda axšav.*
 Zehava taking.care.FEM.SG in.the granddaughter now
 ‘Zehava is taking care of her granddaughter now.’
Ha -bat šela pitra et ha-metapelet.
 the daughter her fired ACC the nurse
 ‘Her daughter fired the nurse.’
Ma ze mamaš mafxid ma še-yaxol likrot. (2nd *ma* head of relative)
 ma it really frightening what that can happen
 ‘Ma it is really frightening what can happen.’
 (25) *Zehava metapelet banexda axšav. habat šela pitra et hametapelet.*
 ‘Zehava is taking care of the granddaughter now.
 Her daughter fired the nurse.’
#Lama ze mamaš mafxid ma še-yaxol likrot.
 lama (why) it really frightening what that can happen
 ‘lama it is really frightening what can happen.’

lama can only function here in its substandard use as the conjunct “because” (specifying the rationale for firing the nurse), in which case it does not constitute a DM with a separate intonation unit.

5.5 *ma* tags

So far we have investigated the properties of the DM *ma*. It was shown that its distribution is limited to clause initial position (cf. the sentences in (13) above). It is interesting then to discover that there are instances of *ma* tags in clause final position as well.¹⁴ These are exemplified in (26a) as well as in their English counterparts in (26b):

- (26) a. *Ata meaxer, ma?*
 you late ma ‘what’
 ‘You are late, what?’
 b. You are late, what?

14. Note that this instance of clause final *ma* is distinct from clause final *harey* in both intonation and function.

The clause initial DM *ma* and clause final *ma* tag fulfil distinct, yet related, functions. Tag *ma* is used to confirm or verify the content or truth of a given piece of information. In fact it could be perceived of as expressing an epistemic bias towards a view that would confirm the information (*cf.* Huddleston 2002: 894) and as such it may render these instances cynical. The sentences in (26) could be characterized as:

- (26) c. S: We both seem to share knowledge with reference to
your being late at all times. Please confirm.

DM *ma*, on the other hand, points out the SK and potential accommodations to it, when S understands that H is not aware of it.

So that in:

- (27) a. S: *Ata lo yaxol lekabel et ha-job. ma ata tamid meaxer.*
You not can get ACC the job **ma** you always late
'You cannot get the job. *ma* you are always late.'

In (27a) S uses the *ma* clause to remind H of the SK, *i.e.*, that H is always late. The clause initial DM and the tag *ma* differ then as to the status of SK. DM *ma* can be used in justifying or explaining a state-of-affairs on the basis of SK. S assumes the information is true and accessible and makes H aware of it. In the case of *ma* tag, however, no such certainty is evident. S suspects this is the case but asks H to confirm it. Thus (27b) cannot replace (27a) in the same context.

- (27) b. # S: *Ata lo yaxol lekabel et ha-job*
You not can to.get ACC the job
Ata tamid meaxer, ma?
you always late **ma**
'You cannot get the job. You are always late *ma/what?*'

There is a clash between the certainty which S exemplifies by virtue of her status with respect to the job (*e.g.*, she could be the boss) and the tentativeness she expresses in the immediately following clause.

The interchange in (28) is insightful in this context:

- (28) S: *Ata tamid me'axer, ma?*
you.sg always late **ma?**
'You are always late, *ma* (what)?'
H: *Ma ani af. pa'am lo exarti*
ma I never no was.late.1.sg
'Ma I have never been late'

To S's suggestion (in 28) that both he and H know that H is always late (*i.e.*, that it is part of SK) H replies that this is not the case, rather, S has forgotten or was

unaware of the real SK, namely, that H is never late. This could, of course, be used in a manipulative manner, that is, H may present as SK material that is not in fact part of SK nor can be inferred from it. Similar manipulations may be found in the use of a variety of modal adjuncts such as *obviously* and *evidently* in contexts which are neither obvious nor evident (*cf.* examples in 5.6 following and a brief discussion in Michell 1976; Ariel 1998 and Downing 2002, 2003 and 2006).

5.6 Non-ad-hocness (of constraints)

It is important to point out that the factors constraining the use of DM *ma* are not ad-hoc or unique. S's assessments of H's awareness of the relevant SK is shown to be functional in the use of modal adjuncts like *obviously*, as well. Michell (1976) argues that the conditions specified for the occurrence of modal adjuncts like *obviously* have to do with the extent to which the information they modify is available to H or inferable on the base of it. He demonstrates it by showing the difference between the interchanges in (29) and (30):

- (29) S: How old is your son now?
H:# Well, obviously he turned thirteen this January. (his 9)

which is odd under the assumption that the information is not available to H.
and

- (30) Obviously, I have to operate. (his 10)

uttered during a medical consultation between physicians who have access to the facts concerning the patient's health.

A related observation with reference to the use of *surely* in British English, has been made by Downing (2002, 2003 and 2006). Downing argues that British English *surely* indexes states of knowledge of the interlocutors when S and H differ as to their SK (which she refers to as *common ground*). She suggests that *surely* functions as redefining common ground between speakers according to context covertly expressed by it and inferred by H. Her findings are based on data from the British National Corpus. Interestingly, but not unexpectedly, these could be used manipulatively by S as in:

- (31) a. Surely you know that P

which amounts to S's saying:

- (31) b. I am certain you know that/we both believe P.

when there is no factual basis for this assumption.

So far we have examined the Hebrew DM *ma* as an instance of anchoring incoming material into the discourse in cases where inconsistencies are apparent

between newly introduced material and information assumed to be already in the addressee's Knowledge Store or inferable on the basis of information S assumes to be accessible to H. It was claimed that *ma* is functional in acknowledging and possibly rectifying such incompatibilities at the service of consistency.

6. *stam*

Before I conclude I would like to suggest that future research should be conducted on additional DMs and their function in the preservation of discourse coherence. One such DM that comes to mind is Hebrew *stam* (roughly: "pointless", "not sufficiently well-defined") the function of which is to instruct H to delete material from the discourse model in the face of a sharp contradiction between its content and information taken to be SK. This DM, then, is functional in the preservation of consistency, since it instructs H not to add false information to the SK (cf. Ziv 2005).

As a brief survey to be developed in the future consider first cases where *stam* functions as a restrictive focusing adjunct in its literal sense. It should be noted first that defining *stam* is not a trivial task. Thus, Even Shoshan (1963: 1134), for example, suggests three related senses: (1) lack of clarity, unspecified or not sufficiently well-defined matter, (2) generality, lack of stability, and (3) pointless, without explicit reason or purpose. The latter may be akin to English "simply" or "just".¹⁵ In the following example:

- (32) Mother to her son upon his getting angry at what he considers to be an invasion of his privacy:
 Mother: *Matay ata xozer?*
 when you return
 'When are you coming back?'
Al titragez, stam raciti lada'at
 not get.angry *stam* (I) wanted to.know
im lehaxin lexa aruxat.erev.
 if to prepare to.you MAS.SG supper
 'Don't get angry. I just/simply wanted to know whether to prepare supper for you.'

15. There is a use in science and technology where the adjectival *stami* designates neutrality with respect to a given property; it is neither positive nor negative. In the Jewish laws of Kashrut (Dietary laws) *stami* refers to food which contains neither milk nor meat related components (also referred to as "parve").

Using *stam* the mother suggests that there is no reason for the son to get angry, since the question was not intended as an invasion of privacy, rather her point was to ask (indirectly) whether she should prepare supper for him. We could then characterize the use of *stam* here as: "Do not attach any (additional) significance or intention to my utterance P beyond what is expressed explicitly".¹⁶

A few more attested examples will illustrate the point to a greater extent.

- (33) Mali, 27, from Tel Aviv, comes to the Kibbutz looking for a youngster, Rakia, with whom she had a one-night affair and who never called her since. Rakia apparently had a nervous breakdown and so his mother tried to protect him. Upon Mali's standing at the doorstep Rakia's mother becomes suspicious and asks:
Rega, u- mi at?
 moment and who you?
 'One moment, and who are you FEM.SG

Mali goes on recounting her feelings:

Ani kima'at ve-hiyapaxti bi-vxi merov tadhema
 I almost and burst.out in cry from astonishment
ume'axzava ve-amarti:
 and disappointment and said:
lo xasuv, stam yedida.
 not important *stam* (just) friend (FEM.)
 'I almost burst out crying of astonishment and disappointment and said:
 It doesn't matter, just a friend.' (Y. Ben-Ner *ir miklat* 2000: 40)

a little bit further in the story Rakia's mother says:
 "Listen, the last thing he needs now is "*stam yedida*" ("just a friend")

In this case *stam* designates lack of particular importance, here it amounts to a friend who is not particularly close to him.

- (34) A man is sitting on a bench waiting patiently and quietly. Two meters from him a pair of doves are trying to pick out each other's eyes.
Hem afilu lo ravu al oxel, stam bli siba.
 they even not quarreled on food. *stam* without reason
 'They didn't even fight over food. *stam*, with no particular reason.'
 (E. Keret *Savlanut In: Gaaguay lekisinger*: 154)

In its DM correlate *stam* or more so *staaam* (where the vowel sound is considerably longer) serves the function of a DELETE instruction with respect to the

16. In this example *stam* is interchangeable with *rak* ("only") and *pašut* ("simply") cf. Ziv 2001.

information presented in the immediately preceding informative segment, in case S knows it is false.¹⁷ This instruction stems from the need to update the SK with information that is consistent with material assumed to be already there and preserve coherence.¹⁸

The following examples demonstrate this use:

- (35) S: *Šamata? Mistaber še-carix lekabel xisun*
 heard.2.MASC.SG turns.out that-need to.get vaccine
neged šapa'at ha'ofot.
 against fowl flu
 'Did you hear? It turns out that you need to get vaccinated against
 fowl (avian) flu.'
 [Pause]
staaam!

stam amounts to “just joking”, do not take me seriously. The instruction is to delete this information from the Discourse Model and not to introduce it to SK. There are of course paraphrastic ways of conveying the same idea, e.g.: “Do not take me seriously”, but the convention associated with *stam* as a DM is DELETE!

Yet another example, on the model of an attested one is the following. It is taken from an Israeli TV program “Words is all I have got” in Channel 2 when Gal Oxovski (screen writer) interviews Hava Alberstein (a famous singer) April 4, 2005. Trying to make a point about the use of English in advertisements about entertainment Hava reads from a local paper. The following is the gist of what she is saying. (In trying to emulate the example I used Jerusalem's *axbar ha-ir* (City's mouse) from April 14th 05). It should be noted that the “Englishisms” are written in Hebrew spelling in the original version.

- (36) a. *Line haxayalim shel ha-mulan me'areax et ha-di jays*
 line of the. soldiers of the. Moolan hosts ACC the D.J.s
 Soldier's line of the Moolan hosts the D.J.s

17. With respect to the DMs, incidentally, in addition to the obvious differences in their distribution from the corresponding lexical entity, in several cases the form of the two is distinct as well. Thus, only DM *staam* may occur with a longer vowel sound, but not its corresponding literal entity. DM *ma*, but not its WH equivalent, constitutes a unique intonation entity. Also cf. Shloush (1998) for a discussion of the Hebrew *be-kicur* (“shortly”) and its DM counterpart *be-kicər*

18. cf. Ariel (1990) for the suggestion that stored information is generally taken to be true. Note in this context too that providing misleading information only in order to delete it later may be functional in joking.

naxum ela ve-xen sokolovski be-bek to bek
 Nahum Ela and Xen Sokolovski in back to back

Fri stayl. Alkohol muzal.
 Free Style. alcohol reduced-price

- b. *ha-erev be- BOON mesiba ivrit be-kaxol lavan*
 this. evening in BOON party Hebrew in. blue white (colors
 of the Israeli flag)
ve- tu lo.
 and nothing more. (from Aramaic)
 'This evening in Boon a “Hebrew” party in blue and white and nothing else.'
 (The contrast in the genres is striking.)
- c. *Ha-ever be-mulan: chil out*
 This evening in Moolan Chill Out (music style)
ba-ša'ot ha-gdilot, haus ba-šaot ha-ktanot.
 in. the hours the. big House in. the hours the. little (House: Electronic
 music)
 'This evening in the Moolan: Chill Out early in the evening, House in
 the wee hours of the night.'
- d. *Ha-ever: nomulus be-set minimal be-goolé*
 this. evening Nomulus in set minimal at the Goole
 (set minimal: music style)
 Gal: *Nomulus ze ani. Staaam*
 Gal: nomulus is me *Staaam*
 'I am Nomulus staaam'

Gal's *staaam* functions to instruct Hava to DELETE the information just supplied, or, alternatively, not to add this information (*i.e.*, that he is Nomulus) to her Knowledge Store, since it is false.

Incidentally, if we examine the use of *stam* in both its literal reading and its DM sense, we will realize that the two are clearly related. In its literal reading we get the sense where lack of attribution of intention in a given context is evident (“Do not attribute intention to P or delete intention, other than the one explicitly specified”) and as a DM it provides an instruction to Delete a piece of information when it is false. The common denominator seems to be: Delete from the Discourse Model a piece of information since it is false.

7. Conclusion

In this paper I have examined lexical markers in Hebrew the function of which is to help anchor new information into the discourse when it appears that it is

inconsistent with information taken to be part of SK. Pointing out the apparent inconsistency and the consequent attempt to rectify it constitute necessary steps in the construction of a well-formed discourse, one that demonstrates Coherence. The significance of such text-therapeutic devices in the overall conception of discourse structure suggests that similar markers ought to occur in other languages as well. Such studies will be the subject of future research.

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