1. Introduction

In characterizing the notion of footing, Goffman writes:

A change in footing implies a change in the alignment we take up to ourselves and the others present as expressed in the way we manage the production or reception of an utterance. A change in our footing is another way of talking about a change in our frame for events. [...] participants over the course of their speaking constantly change their footing, these changes being a persistent feature of natural talk (1981: 128, emphasis mine).

My goal here is to investigate the role of discourse markers in creating and reflecting frame shifts in casual Israeli Hebrew talk-in-interaction. Research on code-switching suggests that discourse markers are perceived as a distinct and unified category because bilinguals consistently switch languages in verbalizing these markers (Maschler 1994b). In the present study I continue to investigate this distinct and unified category, this time in monolingual discourse.

First, I define discourse markers and describe their distribution in the database according to interpersonal, referential, structural, and cognitive categories, and within each category, according to function. This sheds some light on the nature of the processes which take place at frame shifts in the particular genre which the database represents.

Second, I develop an expanded view of frame shifting, based on Becker's approach to text as shaped by the constraints of the context in which it takes place (1979, 1988). I draw also on Chafe's work, in particular, on his distinction between two major types of topic development in discourse: elicitation, in which forward movement through the topic is driven by the interaction between participants, and narration, which are "basically self-sustaining topics, those that do not require interaction for their development" (1994: 135).

1 This study was made possible with a research grant from the Smart Institute of Communication at the Hebrew University of Jerusalem. I thank Michal Peled, Tamar Rubin, and Schlomo Kim for help with transcription and coding. I wish to thank Peter Auer, Pete Becker, Wallace Chafe, Pamela Downing, Jack Du Bois, Shari and David Satran, Emanuel Schegloff, Sandy Thompson, Polly Szatrowski, Ilan Yaniv, and Paul Woodward for discussions and comments on various ideas in this paper. Previous versions of this paper were presented at the Fifth International Conference of the International Pragmatics Association (IPrA), Mexico City, July 4-6, 1996, and at the Colloquium of the Department of Linguistics, University of California at Santa Barbara, October 1, 1996. Finally, my thanks to the people I have named Avner and David in this study, without whom all this would have been impossible.
Elicitation and narration both exhibit frame shifting. I argue that points of frame shift constitute boundaries in interaction and sort out these boundaries according to two different hierarchies: one for elicitation, the other for narration. I propose that the discourse markers which appear at these boundaries show different patterns of employment, depending on whether they appear in narrational or elicitation discourse, and depending on the level of the boundary in the hierarchy. The findings support the idea that higher-level boundaries are more significant in interaction because contextual constraints (Becker 1979, 1988) shift more drastically at these moments in talk.

The overall goal, then, is to move closer to an understanding of the systematicity found in the employment of discourse markers, from aspects of both type and function.

2. Data and methodology

The study is based on audio-recordings of 11 conversations between college educated Israelis of Ashkenazi origin (i.e., native-born Israelis whose ancestors came from East European countries). Eleven participants were asked to record casual conversations with their family or friends. A segment from each of the 11 conversations was chosen for transcription and analysis. The segments transcribed range in length from 1 to over 8 minutes and the number of participants range from 2 to 4 per interaction. The data transcribed and analyzed for this study total approximately 30 minutes of casual talk among 31 different Israelis.

Quantitative findings are based on analysis of these texts. I will illustrate the qualitative findings, however, through discussion of one particular conversation. This interaction is a segment of dinner table talk which took place in my home. The participants were three Israelis, two of whom I call Avner and David, and myself. David and I, acquaintances since our high school days in Jerusalem, were graduate students at the time. Avner, an Israeli who was raised on a Kibbutz, is a fairly well-known poet and literary critic who was teaching at our University. This is Avner’s story concerning how he avoided being drafted to the Israeli Air Force and the discussion that preceded it.

The 30 minutes of talk were transcribed in full and segmented into intonation units following Chafe 1994 with a few modifications. A transcription of the particular

---

2 Other transcription conventions are as follows:

... -- half second pause (each extra dot = another 1/2 second)
--- -- perceptible pause of less than half a second
(3.22) -- measured pause of 3.22 seconds
; -- primary stress
, -- secondary stress
" -- particularly marked primary stress
, -- comma at end of line -- clause final intonation (‘more to come’) 
. -- period at end of line -- sentence final falling intonation
? -- question mark at end of line -- sentence final rising intonation
! -- exclamation mark at end of line -- sentence final exclamatory intonation
Ø -- lack of punctuation at end of line -- a fragmentary intonation unit, one which never reached completion
-- -- two hyphens -- elongation of preceding vowel sound
In his recent book, Becker describes two kinds of moves a linguist makes in studying a distant language, glossing and parsing. The latter has reached in modern linguistics a very high degree of sophistication, but the former, glossing, is still done in a way that suggests it is a simple preliminary to the more complex act of parsing. Word-for-word glossings are given to passages, and then, for all readers who do not already know the language under study, the rest of the discussion is carried out on the basis of the glossings. My argument is that a particular glossing, a deceptively simple translation, determines the parsing to a large degree. To gloss, say, a Burmese sentence into English is to anticipate an analysis using English categories. (1995: 211).

In supplying an English gloss for this Hebrew text, I encounter the danger of anticipating an analysis using English categories. This danger is even more serious in the analysis of talk-in-interaction, because it involves so many additional issues besides the grammatical categories of sentence-level analysis, e.g., narrating (Labov 1972; Chafe 1987, 1994), agreeing and disagreeing (Pomerantz 1984; Sacks 1987), backchanneling (Duncan and Fiske 1977, Tao and Thompson 1991), co-constructing (Lerner 1991; Ferrara 1992; Ono and Thompson 1996), etc. Thus, using English words to describe Hebrew conversational actions (Ford and Thompson 1996) may be misleading, because the categories of interactional moves differ across the two cultures.

With this note of caution in mind, let us examine the transcription and translation of the following 79 intonation units from the conversation between David, Avner, and myself, attempting not to reduce it to its English ‘equivalent’. Discourse markers are given in boldface and some points of frame shift, which will be elaborated on below, are indicated by solid lines (single and double) and discontinuous lines:

vertical line to the left of two consecutive lines indicates overlapping speech, two speakers talking at once. vertical line to the right of top line and continuing to the left of bottom line indicates latching, no interturn pause

/??????/ -- transcription impossible
/words within slashes/ indicate uncertain transcription
ritard. -- ritardando, slowing down
f -- forte, spoken loudly
[xxxxx] -- material within square brackets in the gloss indicates exuberances of translation (what is not there in the original).
1 David: ... bekitsur 'anáxnu hayinu patriyotim.
    in short we were patriots.
2 Yael: ..... kén?
    yes?
3 Avner: ..... n--ú?
    nu ('yeah, go on')?
4 David: ..... vekulá--nu ratsinu lihyot kraviyí--m,
    and we all wanted to be battle unit [soldiers],
5 ..... ve--'éx ze holex hayom,
    and how it goes today
    and how does it go these days,
6 ..... be--xèl 'avir kulám harei holxim,
    in force air everybody PART\(^3\) goes
    to the air force, as you know, everybody goes,
7 ..... mà,
    what (lit.),
    [what do you mean???],
8 ze--.. ze . . kavòd gadó--l
    it it honor great
    it's .. it's .. a great honor.
9 Yael: naxón.
    right.
10 ..... 'az réga . . 'az 'e--h
    so one second so uh
11 Avner: \(\text{oy bexávexa,}
    \text{oy come on,}
    \{------f. high pitch------}\)
12 ..... 'aval 'ata yode'á,
    but you know
    \{------f. high pitch------\}
13 . . kshe'ata matxîl 'takúrs,
    when you start th' course,
14 . . sheze--.. 'e . . mikàn 'ad lehoda'a xadasha.
    that it's uh from here until announcement new
    that it's .. uh .. uh .. from here to eternity.

\(^3\)Ariel (1988) analyzes this particle as a pragmatic operator signaling that what is under its scope
(in this case the entire intonation unit) is non controversial or given, while at the same time marking it as
justifying another claim, on which it is dependent for a Relevance interpretation. See also Ariel 1966.
15 David: ... 'a--vale 'ta vodé'a, 
but y'know,

16 ... 'e--h . . . 'e . . . yèsh 'eize min . . . 'inértsia kazot.
uh u there's some kind/sort inertia like this
uh . . u . . there's this kind of . . inertia sort of,

17 . . bekol hadvarím ha'elu.
in all these things,

18 Avner: 'ani 'asapér lexá mashehu 
I will tell you something
'al ha'inértsia hazot.
about inertia this
I'll tell you something about this inertia.

19 Yael: {sigh}

20 David: {sigh}

21 Avner: . . . (1.18) badòr shelí--, 
in my generation,

22 . . shehu be'e--rex . . 'esrím shana lifnei hador shelaxè--m, 
which is about twenty years before your generation,

23 . . haya mekubal, 
it was customary,

24 . . shemazminim 'et kól hakibútšnikim, 
that they invite all the Kibbutzniks,

to invite all the Kibbutzniks,

25 . . bnei shvá 'esre, 
old seven teen
[who were] seventeen [years] old,

26 . . sheyesh latam . . netunei 'eh . . táyis, 
that there is to them data of uh flight
who had potential flying skills,

27 . . lexéil ha'àvír, 
to force the air
to the air force.

28 . . bodkim mi rotsé veze veze, 
they [would] check [to see] who wants [to go] and this and that,
they would check to see who wanted to go and so on and so forth,
Yael Maschler

29 ...'aní kvar 'àz yadati,  
I already then knew

30 ... she'aní holex lihyot meshorér,  
that I [was] going to be a poet,

31 ...'aní ló holex lihyot tayàs,  
I [was] not going to be a pilot.

32 Yael: {laughter}

33 Avner: ... (2.01) 'avāl mà shehaya me'anyen li'ró–t,  
{-------------higher pitch and volume-------------}

but what (that)was interesting to see,

34 ... ze... 'aní hirgásti,  
is... I felt  
was... I felt,

35 ...'eix shenivné-- 'alai làxats,  
how builds up on me pressure  
how pressure was building up on me,

36 ... halaxats hakvutsáfí,  
the group pressure,

37 ... ki... 'eh... kol hash'ár hem mé–tu lihyot tayàsim.  
because b.../a... uh all the rest they were dying to be pilots.

38 Yael: mhm.

39 Avner: ... (1.11) ve'aní báti,  
{----ritard.----}

and I came,

40 ... kshe'aní bematara mugdérêt,  
when I'm in a goal definite  
with a definite goal in mind,

41 ... bashlosha yamim ha'ele,  
in three days these  
in these three days,

42 ..... (1.62) shelo yihye lahem shúm safék 'axarei shlosha yamín--m,  
that not will be to them any doubt after three days  
that they should have absolutely no doubt after three days,
... she'ani lo mat'i--m!
that I'm not suitable [to be a pilot]!

Yael: {laughing sigh}

Avner: ... (0.75) 'ani ló yadati 'od 'èix /sh/hatsava po'el,
I didn't know yet how the army operates
I didn't known yet how the army operated,

... xashavti she'im hem rotsim 'otxa--,
I thought that if they want[ed] you,

... 'ata biydeihém,
you [were] in their hands.

...... (2.04) 'ata vode'a,
you know.

... ze kol kàx matsxík,
it's so funny,

... kshe'ata... m... memalè... 'eh... she'elon psixotéxni,
when you... f... fill out... uh... a psychotechnic questionnaire,

... ve'ata maxlít lidfók 'et ze,
and you decide to screw it [up],

... ze kol kàx matsxík!
{slower}
it's so funny!

... /mikene/ mimà 'ata mefa--xéd.
/?????/ from what you are afraid
/?????/ what are you afraid of?

mixóshex,
of darkness,

migóva,
{laughing}
of height,

David: laughter

Yael: laughter

Avner: ... 'ata vode'a... ve'ani betsurá
you know... and I in a manner
...'ani tsarix lehilaxém be'atsmi, I have to fight myself,

lehamshix .. ba.. ba.. bamisxák haze sheli shlosha yami--m! to continue .. with.. with this game of mine [for] three days!

... 'eh.. s'tomeret .. pashut betsura mudá--'at legamrei, uh I mean simply in way conscious totally uh .. I mean .. simply in a totally conscious way,

laharós 'et .. kta .. ta'mivxanìm, to destroy the .. bl [ots] .. th' tests,

mar'ím lexa kol mine--i .. 'eh .. e.. dvarim, {change of tone------------------}
they show you all sorts of .. uh .. u .. things,

ma .. 'ata ro'é. what [do] you see.

kén, yes, [are you with me?]

köl minei ktamei rórshax, all sorts of blots Rorschach
all sorts of Rorschach blots,

Yael: {----laughter-------}

Avner: ma | she'aní ra'iti sham 'adonì, {---------laughing---------}
what that I saw there Sir, what I saw there Sir.

Yael: {----laughter-------}

Avner: lo ra'atá shifxá | 'al hayam! {------------laughing-------------}
didn't see a female slave on the sea a female slave had never seen on the sea!

Yael: {----laughter-------}

David: {---laughter---}

Avner: ....... (2.66) 'az zèhu haya li 'inérsia, {------------change in tone-------------}
so that's it there was to me inertia, so that's it I had inertia,
74  ... 'אני 'אה 'א--מ
     I  uh  u--m

75  يا.
yà (German 'yes').

76 Yael:  ... 'אני 'anford lo nisiti
           I  never  tried

77 Avner:  ze mámash nhecdår hadaver haze!
           this really great thing
           this is really great this thing! {referring to food}

78 Yael:  ... kén?
yeah?

79  ... todá rabà!
    thanks!
3. Discourse markers

Locations of frame shifts in the conversations were identified in a manner explained in the sections below and then correlated with structural features. The structural features involved in the negotiation of frame shifts are of prosodic, syntactic and lexical nature. This study focuses on discourse markers and relates also to intonation contours and pauses.

Schiffrin defines discourse markers as 'sequentially dependent elements which bracket units of talk' (1987: 31). In this study, as in my previous studies of discourse markers in Hebrew-English bilingual conversation (e.g., Maschler 1994b, 1995, in press a & b), the definition is somewhat different and includes both a semantic and a structural component. In order to be considered a discourse marker, the utterance in question is required first of all to fulfill the semantic requirement of having a metalingual interpretation in the context in which it occurs (i.e., rather than referring to the extralingual world, it must refer metalingually to the realm of the text or to the interaction between its participants).

The second requirement has to do with structure: the utterance in question must appear at intonation-unit initial position, either at a point of speaker change, or in same-speaker talk, immediately following any intonation contour which is not continuing intonation (i.e., not after a comma). It may occur after continuing intonation or at non intonation-unit initial position only if it follows another marker in a cluster.

336 discourse markers were employed in the 30 minutes of interaction. 319 of them, or 95% occurred at points of frame-shift. The markers and their distribution in the database are presented in Table 1.

Becker (1979, 1988) perceives of text as the interaction of constraints originating in the different contextual realms shaping discourse: the realms of interpersonal relations, reference, linguistic structure, prior-text, medium, and silence. In an earlier study (Maschler 1991) I have characterized the boundaries at frame shifts as points in the discourse at which we find maximal changes in these contextual constraints, in relation to the surrounding discourse. The classification of discourse markers in Table 1 is based on these contextual realms shaping discourse. It is a further development of the classification proposed in Maschler 1994b, suggesting that markers be sorted according to the realm of context in which there are maximal shifts in aspects of context when the marker in question is employed. The discourse markers identified in the present study function in three of the realms mentioned in Becker’s work: interpersonal relations, reference, and structure, and in a fourth realm, that of cognitive constraints (Chafe 1987).

---

4In Maschler 1991 I used the term ‘language game (Wittgenstein 1958) boundaries’ for the boundaries at frame shifts discussed here, and in Maschler 1994 I used the term ‘verbal activity boundaries’. 
<table>
<thead>
<tr>
<th>Interpersonal (35 types, N=114)</th>
<th>Referential (8 types, N=136)</th>
<th>Structural (12 types, N=29)</th>
<th>Cognitive (9 types, N=57)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Perception verbs:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>tir'i / tir'i (look) (2)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>'at shome'at? (you hear?) (1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ta'amini li (believe me) (2)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>'ata mevin? / 'at mevin? (you see?) (2)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>lo hevanti ((1) didn’t get it) (1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>'ata vode'a / 'at vode'a (you know) (6)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>lo y'dat (don’t know) (2)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>'an'lo vode'a (I don't know) (1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Verbs of saying:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>tagidi (say) (1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>tagidi li (tell me) (1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>me'tanen ma tagidi (I wonder what you'll say) (1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>'ani 'ashir lexa (I'll explain to you) (1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Agreement:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ken (yeah) (17)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>naxor (right) (4)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>'okev (okay) (1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>bidvak (exactly) (1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>lev (good) (10)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>me'syran (great) (1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>vaxol lhekot (could be) (1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>'ze vaxol lhekot (this could be) (1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>be'net (sure) (1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>be'emot (really) (1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>'aha (aha) (1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Disagreement:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>'i (no) (9)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>'an'lo beruva (I'm not sure) (1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>bezdebe (come on) (1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Amazement:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ken? (yeah?) (3)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>be'emot? (really?) (3)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ma (what) (2)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>yo (wow) (1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Maintaining contact:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ken (yes) (1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Urging speaker to continue:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>mi (go on) (12)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ken? (yeah?) (1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Displaying enthusiasm:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>'ala ketha! (great story!) (1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>'eize ketha! (what a story!) (1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Other:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>boiboi,... (let's...) (2)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The interpersonal category (in the first column of Table 1) includes markers whose use facilitates in some way the negotiation of closeness vs. distance between participants (Bateson 1972; Scollon 1982). It includes perception verbs, verbs of saying, agreement, disagreement, amazement, enthusiasm, and urging tokens, among others. The referential category (second column) includes deictics and markers comprised of connectives, whose functions are to mark relationships of cause, consequence, contrast, condition, coordination, and disjunction between conversational actions. These relationships mirror the semantic properties of the connectives. The structural category (third column) includes markers providing information concerning the ways successive conversational actions are related to one another in terms of order and hierarchical relations. Finally, the cognitive category (fourth column) includes markers providing information about cognitive processes occurring at frame shifts which are often revealed in the medium of spoken discourse.

The point here is not to claim that each discourse marker has but one function. Rather, this table represents an approach according to which each marker generally has one relatively unmarked function (one that is more commonly found in the conversations) and that other, more marked functions may emerge for that discourse marker in different contexts. This unmarked function is more difficult to point out for some discourse markers than for others, but a gross categorization, such as the one in Table 1, is possible.6

The number listed in parentheses by each marker gives the number of tokens found for that marker in the data. The first number at the top of each column indicates the number of different markers (types) in that column7, and the second number (N) indicates the total number of tokens in that column.

We will return to this table, but first a consideration of frame shifts and an examination of our particular text are in order.

4. Frame shifts

Starting out with Goffman’s notion of changes in footing, or frame for events, I would like to point out that not all frame shifts are ‘equal’. The shift to a new story, for example, is greater than the shift between a question and its answer. Of course, the answer to a question can be a story, but then the frame shift at the beginning of such an answer would be greater than the shift between a question such as ‘What time is it?’ and an answer such as ‘Three thirty’.

In a previous study I suggested that this is because, from a contextual perspective, what happens at frame shifts are maximal changes in the contextual constraints (Becker 1988) shaping the interaction, relative to the surrounding discourse, and the degree to which these changes may occur varies (Maschler 1991). At the beginning of a new story

---


6 This is why the marker ken (‘yes’) is found in four separate categories in Table 1. Still, all four categories belong in the interpersonal realm.

7 The above-mentioned marker ken (‘yes’) (see the previous footnote) was counted as two different types on the basis of a structural difference: one type is verbalized in sentence-final falling intonation, the other in sentence-final rising intonation.
one often finds shifts in the realms of reference (a new story world), linguistic structure (as described in Labov's 1972 narrative scheme, for instance), prior-text (the prior knowledge and experience evoked by the story are different than those evoked in the immediately preceding segment), interpersonal relations (as one speaker occupies a more significant part of the floor in his or her attempt to make a point, thus creating some temporary 'inequality' in interpersonal relations), silence (as other speakers remain more silent than the story-teller for a longer period). At the beginning of an answer to a question such as 'What time is it?' shifts are more limited. There are shifts in the interpersonal and silential realms, as participants shift roles from speaker to hearer, and vice versa. There are shifts in linguistic structure, such as a shift from the indicative to the interrogative mode, shifts in prosodic patterns, or shifts in pronominal usage, but referential and prior-textual constraints often remain relatively constant.

This can be illustrated in our text. The frame shift at the beginning of Avner’s story (line 18), involves many more changes in contextual constraints in relation to the frame shift at the beginning of my response (line 9) to David’s statement in lines 1, 4-8. The frame shift at line 18 involves shifts in the realm of reference, as Avner moves into the world of his story. It involves shifts in linguistic structure, as the segment immediately following this frame shift will have a structure which, we will see, is similar to that described in Labov 1972, whereas the immediately preceding segment did not involve this structure. There are shifts in prior-textual constraints, as different prior knowledge and experience, such as the specifics of pilot-training entrance exams (e.g., who is invited to take these exams, the group pressure to join the Air Force, the Rorschach test with which we are all familiar), become relevant. There are shifts in interpersonal constraints, as Avner begins this story, whose point is to present an attitude towards joining the Air Force which is contrary to David’s ‘patriotic’ attitude. Finally, there are also shifts in silential constraints, as I and particularly David remain relatively silent throughout the story, whereas in the immediately preceding segment we were not.

At line 9, on the other hand, the shifts in contextual constraints are less prominent. There are shifts in interpersonal constraints, as I agree with David’s previous statement; shifts in linguistic structure, as the following two intonation units involve a cluster of 5 discourse markers, whereas the preceding lines involved languaging rather than metalanguaging (Maschler 1994b); and in the realm of silence, there is, of course, the shift in speaker-hearer roles at this turn boundary. But in the realms of reference and prior-text things remain more or less constant.

Thus, conversational action boundaries may be thought of on a continuum, at one end of which we find boundaries involving drastic shifts in all contextual dimensions, whereas on the other we find minimal such shifts (but still, maximal in relation to the discourse segment in which they occur).

In talking about these boundaries in interaction, I prefer the term ‘frame shift’ to Goffman’s ‘footing change’, because the notion of footing focuses on the interpersonal dimension (‘the alignment we take up to ourselves and the others present’, Goffman, ibid.). It seems to me that such shifts in interpersonal constraints may be, and often are accompanied by shifts in constraints from other realms of context (as illustrated in the preceding paragraphs). The term ‘frame shift’ on the one hand, does not place the realm of interpersonal relations above the others, and on the other, does not exclude the possibility that only interpersonal constraints shift at a particular boundary. Thus, it allows
the flexibility necessary in order to describe these moments in interaction which may differ greatly from each other in terms of the shifts involved. Furthermore, the term ‘frame shift’ evokes the idea that discourse markers constitute a frame for the discourse (Maschler 1994b).

One criticism against the notion of these boundaries is that they do not exist for the participants of the interaction themselves (Schegloff, p.c.). My answer to this is that the shifts in contextual constraints are in relation to surrounding discourse, to both prior and upcoming talk. Prior discourse is available to the participants of an interaction, but upcoming talk is, of course, not. To this extent then, the boundaries are ‘real’ for participants themselves. Their perspective on them, however, is more limited than that of the discourse analyst.

Another way to look at all this is through the notion of conversational actions (Ford and Thompson 1996). A point of frame shift is also the beginning of a new conversational action. Because conversational actions are embedded within one another, not all beginnings are ‘equal’. The beginning of a higher-level conversational action (e.g., narrating) is different from the beginning of a lower-level action (e.g., making a minimal response).

One is reminded of Goffman’s discussion of what is here considered the conversational actions of making a ‘statement’ and a ‘reply’. Goffman writes: ‘First, the embarrassing question of units.’ (1981: 22). He explains why the notions of ‘sentence’ and ‘turn’ are not helpful, and continues:

In order to attack this problem, I propose to use a notion whose definition I cannot and want not to fix very closely -- the notion of a “move”. I refer to any full stretch of talk or of its substitutes which has a distinctive unitary bearing on some set or other of the circumstances in which participants find themselves (some “game” or other in the peculiar sense employed by Wittgenstein), such as a communication system, ritual constraints, economic negotiating, character contests, “teaching cycles” [. . .], or whatever. It follows that an utterance which is a move in one game may also be a move in another, or be but a part of such other, or contain two or more such others. And a move may sometimes coincide with a sentence and sometimes with a turn’s talk but need do neither. (ibid.: 24).

I would like to suggest that conversational actions may be embedded within one another in a different way in narrational vs. elicitational discourse, because narrational discourse involves the expectation that one speaker will occupy more of the floor for a while. This is the rationale for suggesting two separate hierarchies for the frame shifts investigated in this study -- one hierarchy for narrational, and one for elicitational discourse.

Let us consider these two hierarchies through examination of the particular text.

5. Elicitation

In the case of elicitational topics, frame shifts were identified according to a three-level hierarchy, of which the highest level is the supertopic (Chafe 1994: 137) -- the general topic discussed in that part of the discourse, the lowest level is the turn, and the middle level consists of two or more turns discussing a subtopic within the supertopic.

Note that the third-level (the turn) boundary differs qualitatively from the two
higher levels, because it is the only boundary that is not determined content-wise. Let us turn to the text for illustration.

About 30 minutes into our dinner, before the segment transcribed here begins, David is recounting his pilot-training days in the Israeli Air Force. This is the supertopic of this part of the conversation. To Avner’s question concerning the circumstances under which he left pilot-training course, David replies that it was he who decided to quit because he was not prepared to serve 7 years, the standard service period for Israeli pilots. This question-answer pair is an example of a subtopic within the Air-Force supertopic. At this point I ask why, then, did he embark on such a task in the first place, and David answers, not without sarcasm, that in his class (unlike my class) it was still ‘in’ to be patriotic. My question constitutes the beginning of a new supertopic in which we discuss our high school days. After this digression, David returns to the previous supertopic of the Air Force.

The segment transcribed above begins at this return to the supertopic, when David reiterates, following the discourse marker bekitsur (‘anyway’, lit. ‘in short’), that his class, as opposed to mine, was patriotic. The contrastiveness of this utterance is indicated by the primary stress on anáxnu (‘we’), which nicely illustrates Chafe’s point that given concepts can be stressed if they are contrastive (1987). The concept of David’s class was given at this point in the discourse, since we had been discussing it throughout the immediately preceding segment, and the primary stress falls on it to contrast it with the concept of my class.

Lines 1-17 constitute another subtopic within the Air Force supertopic, in which we discuss David’s answer to my earlier question of why he decided to join the Air Force in the first place. It consists of 7 turns. We will see that a new conversational action (e.g., making an assessment, agreeing, disagreeing, narrating) begins with the start of each of these turns.

Line 1 begins with the structural discourse marker bekitsur (‘anyway’) returning to the supertopic, and it is uttered in non-final intonation followed by a relatively long pause. This pause is judged “too long” by both Avner and myself, and we each encourage David to continue with the markers ken (‘yes’) and nu (‘go on’), both uttered in sentence-final rising intonation. We begin speaking at precisely the same moment, exhibiting rhythmic synchrony (Erickson & Shultz 1982). In the next turn (line 4), David begins with the discourse marker ve... (‘and’), conjoining his previous conversational action with the following action of making an assessment, which responds to my initial question of why he decided to join the Air Force in the first place: all his friends went and it was considered kavód gadól (‘a great honor’). This turn constitutes one prosodic sentence, ending with sentence final falling intonation in line 8.

The continuing intonation of line 1 suggests that David did not reach a point of pragmatic completion here (Ford & Thompson 1996). Had there been no audience responses, the ve... (‘and’) in 4 would have been counted as a sentence-level conjunction, not as a discourse marker, because it would have followed continuing intonation of same speaker (in line 1). However, as the interaction transpired, two conversational actions (of

---

8It must be clear that a turn may consist of more than one conversational action (as does my turn in lines 9-10, consisting of the conversational action of agreeing (line 9) and that of beginning of a new action (line 10)). As pointed out by Goffman (1981: 24), we are not talking about a structural category here. The decision to focus on a hierarchy of three is, of course, arbitrary.
encouraging the speaker to continue) occurred between lines 1 and 4, rendering this ve...
(‘and’) a discourse marker. Thus we see that the boundary is negotiated by all three of us.
Its level in the hierarchy (i.e., whether it is a boundary between two conversational actions
or between two intonation units within the same conversational action) is a product of our
interaction. In this way, the utterance emerges as a discourse marker from the interaction.

My own turn in lines 9-10 constitutes a cluster of 5 markers: first, naxon (‘right’),
agreeing with David’s assessment and uttered in final intonation. Then ‘az (‘so’), attempting
to begin a new conversational action which appears to have some resultative relationship
with the previous one, rega (‘one sec’), stopping the present conversational action to
introduce something else, and ‘e--h, showing cognitive difficulties in maintaining the
discourse flow (which is also exhibited by the repetition of ‘az (‘so’)). This utterance
constitutes a fragmentary intonation unit (line 10).

My utterance is latched onto by Avner’s objection in line 11, which begins with
a cluster of 3 markers: cognitive oy, realizing something new, interpersonal haxayexa
(‘come on’, lit. ‘in your life’), introducing his disagreement with David’s previous
assessment, and ‘aval (‘but’), introducing the objection (lines 12-13): ‘ata yodé’a, kshe’ata
matxil ‘takúrs (‘you know, when you start the course’) that it’s a long term commitment.
Avner’s turn constitutes one prosodic sentence.

David then responds beginning with a cluster of 4 discourse markers (lines 15-16):
‘aval (‘but’), introducing a contrastive response to Avner’s objection, ‘ta yode’a
(‘y’know’)10, somewhat softening the disagreement11, ‘e--h and ‘e, reflecting processing
time: yèsh ‘eize min . . . inérsia kazot, bekol hadvarím ha’elu (‘there’s this kind of . . .
inertia sort of, in all these things’).

We see that every single turn within this subtopic begins with at least one
discourse marker, often with a cluster of 2-5 markers. Not all turns end in final intonation
because of the interactive nature of elicitational discourse: other speakers may latch,

9 The idiom Avner uses here is mikán’ ad lehoda’a xadasha (‘from here until a new announcement’)
functionally equivalent to ‘from here to eternity’.

10 One important difference between English y’know and its Hebrew ‘equivalent’ is in degree of
‘frozenness’ of the two markers. The Hebrew marker does show some degree of ‘frozenness’, e.g., by often
reducing phonologically from ‘ata yode’a to ‘ta yode’a (as in line 15, but not in lines 48 & 58), and by the
non-occurrence of the plural forms (atem yod’im - ‘you (masc.pl.) know’ and aten yod’ot - ‘you (fem.pl.)
know’) as discourse markers (as, e.g., in lines 48 & 58 here, which are addressed to both David and myself).
However, because the Hebrew present tense verb must be inflected for gender and number in agreement with
the subject of the verb, this marker is much less frozen than its English ‘equivalent’. Furthermore, this
gender-number agreement creates different interpersonal constraints on its usage, as in the case of more than
one participant, or participants of different sexes. The fact that Avner uses the masculine singular form
throughout this conversation with a man and a woman at the dinner table is a reflection of the interactional
constraints discussed below.

11 ‘ta yode’a (‘y’know’) of line 15 differs significantly from ‘ata yode’a (‘y’know’) of line 12. In line
12 it functions not as a discourse marker, but rather in non-metalingual fashion, concerning what one literally
knows upon joining pilot-training (i.e., that it’s a long time commitment, line 14). In its non discourse-marker
role it can be modified by an adverbial clause (kshe’ata matxil ‘takúrs (‘when you start the course’), line 13).
Indeed, ‘ata yode’a occurs in line 12, unlike in line 15, without phonological reduction, although this is not
necessarily the case in all instances of this utterance when it is employed as a discourse marker (as we have
seen, e.g., in lines 48 & 58).

11
overlap, or begin talking because they think the speaker is taking too long a pause (as in
lines 1-4), before the speaker has reached a point of prosodic completion. This also results
in fewer pauses at frame shifts in relation to narrational discourse.

6. Narration

Let us examine the narrational segment that followed. The topic (Givón 1983) of
‘inertia’ is introduced by David in line 16: yəše h'ıze mein . . . 'ınerţia kəzot, bekol hadvarim
ha'elul (‘there’s this kind of . . . inertia sort of, in all these things’). It is this topic which
Avner clings to in order to introduce his own story about the Air Force (line 18): 'ani
'asapēr lexā mashehu 'al ha'inertsa hazot (‘I’ll tell you something about this inertia’).
However, Avner’s inertia turns out to be of a very different sort. While David joined pilot-
training as a result of some ‘inertia’ which all his friends were afflicted by, the point of
Avner’s story is that he had the ‘inertia’ to purposely garble the three-day tests taken prior
to admission to pilot-training in order not to be drafted.

Avner’s story constitutes a disagreement with David because, as mentioned earlier,
it presents a contrasting attitude towards joining the Air Force. Furthermore, it constitutes
a minor escalation in the disagreement which had been developing between them in the
preceding segment (lines 11-17). The story is an instantiation of contrasting attitudes about
‘patriotism’ which they had been aware of throughout the dinner as well as in their
relationship outside this dinner. Avner was known in the community as an Israeli who,
disenchanted with his personal life in Israel, has left the country to look for a ‘better life’
in the US, whereas David had the ‘patriotic’ attitude of an Israeli graduate student abroad,
away for just a few years of training in hope that they would make him more ‘marketable’
upon returning to his home country. Later on in the dinner, David confronts Avner much
more directly, asking him how he thought he could do good research on Hebrew language
and literature while living so far away from the culture in which it was all created. We will
see that these interpersonal ramifications have linguistic manifestations throughout the
particular interaction.

In the case of narrational topics, frame shifts generally corresponded to the shifts
from one episode to the next in the narrative scheme (Chafe 1994: 129-132). This scheme
is similar to Labov’s (1972) narrative structure and exhibits an orientation, a complication
leading away from some baseline normality, a climax, and a denouement returning
consciousness to a new normality. This is often framed by an initial summary and a coda.

Frame shifts in narrational discourse were identified on the basis of content
according to a three-level hierarchy as well. The highest level is the story and it
corresponds to the supertopic level in the previous hierarchy for elicitational discourse.
Then come the episodes within the story, and within the episode come sub-episodes
expressing what Chafe calls “centers of interest”. According to Chafe (1987), each
intonation unit contains at most one new concept (cf. Pawley and Syder’s one-clause-at-a-
time hypothesis (1983) and Du Bois’ preferred argument structure (1985)). This is the one-
new-concept-at-a-time constraint, which was generally found to hold for the Hebrew data
examined here as well. “Centers of interest” are cognitive units larger than the intonation
unit, representing attempts, with varying degrees of success, to push the mind beyond the
As in the case of elicitation, the third-level (the sub-episode) boundary differs somewhat from the two higher levels of the narrational hierarchy. The sub-episode boundary is determined not only content-wise (as are the story- and episode-level boundaries), but also cognitively. The third-level boundaries of the two hierarchies also differ from one another, because turn boundaries are more interactively constrained. Yet despite these differences, we will see that discourse markers employed at both of these third-level boundaries show some similar patterns of employment which differ from those exhibited at first- and second-level boundaries.

As in the case of elicitation, frame shifts in narrational discourse were then correlated with structural features, focusing mostly on discourse markers and also involving some prosodic features. The highest-level boundary between lines 17 & 18 in our text (indicated by a double solid line in the transcription) is unaccompanied by any discourse markers. Avner latches onto David’s talk, which did not reach completion at 17, with the intonation unit tying his story to the context (line 18): 'ani 'asapér lexa mashehu 'al ha'inèrtsia hazot ('I’ll tell you something about this inertia'). This short episode ends in final intonation. I interpret the following sighs at 19 and 20 as our response to Avner’s rather patronizing utterance.

The episode structure of Avner’s story can be summarized as follows:

I  line 18: Initial summary tying the story to the context.
II lines 21-31: Orientation concerning drafting Kibbutzniks to the Air Force and Avner’s attitude.
III lines 33-37: Orientation concerning group pressure to join the Air Force.
IV lines 39-43: Complication: beginning of the actual testing situation.
V lines 45-47: Repair supplying more orientation material.
VI lines 48-60: Complication continued.
VII lines 61-70: Climax.
VIII lines 73-75: Coda returning us to the immediate context.

We see that four additional episodes precede the main complication and climax: two orientation episodes, a beginning of a complication episode, and a repair consisting of another episode supplying orientation. Let us examine these four episodes more closely before we reach the main complication and climax of the narrative.

The second episode of the narrative begins on line 21 with a pause of 1.18 seconds unaccompanied by any discourse markers, after which Avner proceeds to the orientation of his story. According to Chafe (1994: 140), once speakers judge that the scanning of a center of interest has been completed, they express that judgment with a sentence-final intonation contour. With luck, this point of prosodic completion will coincide with a point of sentence completion. A center of interest concerning the general custom of inviting the Kibbutzniks to the Air Force is reached at line 27, as indicated by the final intonation contour which coincides here with sentence completion. Another intonation unit (28) provides more orientation concerning the general custom (bodkim mi rotsé veze veze ('they would check to see who wanted to go and so on and so forth,'), and 3 more intonation units (29-31) provide orientation about Avner’s attitude towards this custom: 'ani kvar 'àz yadati . . . she'aní hólex lihyot meshorér . . . 'aní ló hólex lihyot tayáš, ('I already then knew, that I [was] going to be a poet, I [was] not going to be a pilot'). Content-
Discourse markers at frame shifts in Israeli Hebrew talk-in-interaction

wise, a sub-episode boundary is found before the description of Avner’s attitude (before 29) (the beginning of a sub-episode is indicated by a discontinuous line, that of an episode with a solid line). However, the point of prosodic completion here (end of 27), does not coincide with this sub-episode boundary, as predicted by Chafe 1994.

This episode is followed by my laughter (32), responding to the juxtapositioning of tayas ‘pilot’ and meshorer ‘poet’ in the antithesis of 30-31.

Following a pause of 2.01 seconds (line 33), Avner adds orientation concerning group pressure in that situation. This orientation is preceded by the discourse marker ‘aval (‘but’), marking the contrast between the preceding general orientation and a return to the main point, that Avner, unlike David, had the ‘inertia’ not to be influenced by group pressure. Indeed, it is followed by external evaluation (Labov 1972): mà shchaya me’anyen liró–t (‘what was interesting to see’), verbalized in higher pitch and volume. Thus, the contrast which ‘aval marks here is the contrast between what is not directly related to the point of the narrative and what is directly so related, similarly to what Schifflin has found for English but (1987: 177). This episode consists of one prosodic sentence and it is followed by my interpersonal marker mhm indicating both understanding and agreement.

Line 39 begins the complication after a pause of 1.11 seconds and the discourse marker ve... (‘and’), conjoining the previous orientation to the beginning of the complication. The complication begins in slower tempo relative to the preceding discourse. Avner mentions his frame of mind upon arrival at the test situation in a way that requires sense-making on the part of the audience (Tannen 1989), never quite telling us why the Air Force would have no doubt that he was unsuitable (lines 42-43): shelo yiḥye lahem šhûm safēk ’axarei shlosha yami–m, . . . she’ani lo mat’i–m! (‘that they should have absolutely no doubt after three days, that I’m not suitable!’). I respond to this involvement creating strategy with a laughing sigh (line 44). The episode constitutes one prosodic sentence ending in exclamatory intonation.

Line 45 begins the repair episode with no discourse markers and with a rather short pause (0.75 seconds), suggesting that Avner had already begun formulating the repair in the previous episode (perhaps during the 1.62 second pause of 42). The episode consists of one prosodic sentence supplying more orientation relevant to the point: garbling the tests would make no sense had Avner known, as we do at the time of the telling, that joining the Air Force is voluntary.

After a pause of 2.04 seconds at 48, Avner begins the main complication which consists of 3 sub-episodes. The first and last sub-episodes (lines 48-52 and 58-60) constitute evaluative comments (Labov 1972). They both begin with the interpersonal marker ‘ata yode’a (‘you know’) (lines 48 & 58) and end in exclamatory final intonation (lines 52 & 60). The last sub-episode begins with an additional discourse marker, ve... (‘and’) (line 58), conjoining this sub-episode with the preceding one.

We have already considered Chafe’s finding that once speakers judge that the scanning of a center of interest has been completed, they express that judgment with sentence-final intonation which often coincides with a point of sentence completion. The middle sub-episode (lines 53-55) ends with continuing intonation, but this is not the

12One exuberance of the translation (Becker 1982, following Ortega y Gassett 1959) is the repetition of sounds at the level of phonemes in ‘pilot’ and ‘poet’, which contributes to the esthetics of the translation. Notice that this repetition does not actually happen in the interaction.
intonation of an utterance which the speaker intends to complete. Avner employs here the involving strategy of constructing dialogue (Tannen 1989) to present the examiner’s question mimâ ‘ata mefa–xéd (‘what are you afraid of?’) and his own response mixóshex, (‘of darkness’), migóva, (‘of height’), from which we are to infer that these are just about the worst things a pilot could be afraid of, of course. Another involvement creating strategy here is the list formula (Tannen 1989: 145-7), and the continuing intonation at 55 is part of this formula, signaling that there are more items to this list of fears. Thus, a center of interest has been completed here, although this is not reflected in final intonation, as predicted by Chafe. These involvement creating strategies are followed by laughter from both David and myself. This is David’s first response since the beginning of the story. He is not quick to laugh at this story illustrating an attitude opposite to his.

Next comes the climactic episode following a cluster of two cognitive markers, (line 61) ‘eh . . . s’tomeret (‘uh . . . I mean’), narrating another question-answer sequence in the test. Here the examiner is giving Avner a Rorschach test, consisting of ink blots in relation to which Avner is supposed to answer the question (line 64) ma ‘ata ra’è (‘what do you see?’). Avner never tells us exactly what he said he saw: it was things that (line 69) lo ra’atà shifxá ‘al hayam (‘a female-slave had never seen at the sea’).

This is an improvisation on a proverb from a second century Tannaitic Hebrew text called Shírta, the third of nine treatises which together make up the tannaite Midrash called Mekilta de-Rabbi Ishmael (Goldin 1971). Shírta interprets the Song at the Sea from the book of Exodus in the Bible. The specific proverb goes: ra’ata shifxá ‘al hayam ma shelo ra’a yezezkél (‘A female-slave had seen at the sea things that Yezezkél never saw’), which was said about the miracles performed in front of the Israelites during the Exodus from Egypt, specifically, the splitting up of the sea. The miracles were so extraordinary, that the simplest person present, the female-slave, according to this proverb, got to see things that even the great prophet Yezezkél, who lived much later and is known for his elaborate visions, never got to see (Even-Shoshan 1986: 1404).

Avner’s utterance, then, relies on much prior-text (Becker 1979) and requires two sense-making jobs: figuring out what kinds of things Avner said he saw in those blots which disqualified him from becoming a pilot, and how this is related to the female-slave13; namely, that Avner’s ‘visions’ were even more extraordinary than hers. The involvement is heightened yet by the juxtaposition of the words shifxá (‘female-slave’, line 70) and ‘adoni (‘Sir’, line 68), addressing David, who is the main participant to be involved here, the one who has responded so sparingly to Avner’s involving strategies so far.

This episode also exhibits the only discourse marker which does not occur at a boundary in this text (as mentioned earlier, 5% of the markers in the corpus did not occur at a boundary). It is the ken of line 65 (lit. ‘yes’, ‘are you with me?’). However, in terms of content, one could argue for a lower level boundary here, perhaps fourth in the hierarchy, as it happens following the constructed speech of the examiner what do you see? (in the blots) and before Avner’s comment to us all sorts of Rorschach blots. ken is related to

---

13To be honest, I (and perhaps David) as well as all but one student who have listened to the recording of this conversation over the past 5 years, was not familiar with this proverb at the time. Only later examination of the prior-text of this utterance revealed its full meaning to me. This is perhaps one of the differences between the language of a poet and that of an ‘ordinary person’. However, in spite of this, Avner’s utterance was sufficiently clear to David and myself, as our strong laughter indicates.
cognitive difficulties Avner experienced in verbalizing the concept of Rorschach blots, a process he began already 4 intonation units earlier in line 62, as the false start kta (the beginning of ktamim ('blots')) indicates. Ken in 65 is an interpersonal marker ensuring involvement on the part of the audience in spite of these cognitive difficulties.

The climactic episode consists of one prosodic sentence ending, again, in final exclamatory intonation (70), followed by much laughter from both David and myself. After a pause of 2.66 seconds, Avner begins the coda with a cluster of two markers: referential 'az ('so') and structural zehu ('that's it'), framing his discourse by a return to the topic of inertia (line 73): 'az zëhu haya li 'inérsia ('so that's it, I had inertia'), returning us to the here and now of the dinnertable conversation.

This final episode of the story ends not only with final intonation, but also with the discourse marker ya, a German word in this monolingual Hebrew conversation, signaling that the story has ended.

This is interesting in light of the findings of previous research on discourse markers in bilingual discourse (e.g., Maschler 1994b), showing that in bilingual conversation, discourse is often separated from its frame of markers so that the discourse happens in one of the two languages and the discourse markers are verbalized in the other. The conversation examined in the present study is a monolingual conversation, yet the same strategy is found here. What is unusual about line 75 is that it involves an utterance in another language in a clearly monolingual conversation, or at least not in a situation of Hebrew-German bilingualism.

The lack of a Hebrew marker signaling the end of a conversational action, as well as the need for such a marker in certain contexts, is attested to by a passage from the classic novel My Michael published in Israel in 1968 by the Israeli writer Amos Oz. Michael’s wife tells us (this passage was translated into English by de Lange in collaboration with the author):

And Michael, who sometimes speaks to me as if I were an unruly little girl, converses with his son [Yair, age 4] as man to man. The sounds of their conversation reach me in the kitchen. They never interrupt each other. Michael has taught Yair to end whatever he has to say with the words ‘I have finished’ [gamarti]. Michael himself sometimes uses this expression when he comes to the end of one of his answers. This was the method my husband chose to teach his son that people should not interrupt one another.

Yair might ask, for instance, ‘Why does everyone think something different?’ Yair would then ask, ‘Why aren’t there two men or two children the same?’ Michael would admit that he didn’t know the answer. The child would pause for a moment, consider carefully, then say perhaps: ‘I think Mummy knows everything, because Mummy never says I don’t know. Mummy

14 Though ya is generally not used in the speech of Israelis of my generation (who are also more removed from their European roots, if they have any), I have sometimes heard it used by Israelis of Avner’s generation who come from German background. In their Hebrew it can be described as a word borrowed from German, functioning as a discourse marker signaling the end of a major conversational action, such as a narrative, or, as I have recently heard it, closing a phone conversation, or a short visit by a neighbor.

15 Perhaps the marker zehu ('that’s it') (as in line 73), signaling the end of a conversational action in casual Israeli Hebrew conversation today, was not in use in 1968, when the novel was written. In any event, the functions of zehu are not equivalent to those of ya. One difference is that ya has the flavor of ‘and this is the way it was’, which zehu does not. However, further study is needed to characterize the exact differences.
This artificially created discourse marker, gamarti ('I have finished'), reflects the artificiality and nonhumaness of Michael in the novel. Although this 'artificial discourse marker' is described here as a means by which people do not interrupt each other, from the example given, and from the many contexts in which we find it in the novel, we learn that it is used not merely at the end of a turn at talk, but rather at the end of a larger conversational action.

Following the discourse marker ya, I attempt to begin a new topic and Avner interrupts with the supertopic of food. No discourse markers accompany either my attempt or Avner's interruption.

7. Elicitation vs. narration

Narrational discourse shows different patterns of frame shifting compared to elicitational discourse in several ways. Unlike the elicitational segment, most intonation units preceding particularly second- but also third-level boundaries end with final intonation (e.g., in our text, lines 18, 31, 37, 43, 47, 52, 60, 70, & 75, cf. Chafe 1987), and pauses at particularly second-level boundaries are generally longer (e.g., lines 21, 33, 39, 48, 73). Interruptions and overlaps are less frequent. This has to do with the less interactive nature of narration compared to elicitation, at least with respect to movement through a topic.

Narration and elicitation are, of course, not separate discourse activities. One might say that elicitation is the unmarked case here, as this is the activity speakers engage in most often in casual talk-in-interaction. Narration happens in the midst of elicitation, when a speaker begins a topic that does "not require interaction for its development" (Chafe 1994: 135). However, I would suggest somewhat modifying this definition, because a narrative, too, requires interaction for its development, as the notion of evaluation, which deeply relies on speaker-audience interaction, is one of the main components of narrative (Labov 1972).

Not only does narration occur in the midst of elicitation, elicitation may happen in the midst of narration, as in the case of audience discussion at episode boundaries (Chafe 1987). In the case of the text analyzed here, we find several boundaries of elicitational nature in the midst of the narrational segment (lines 18-75). These are the turn boundaries of the elicitational hierarchy, the points of speaker change during Avner's telling of the story (immediately preceding lines 19, 20, 32, 38, 44, 56, and 71)\textsuperscript{16}. The segments

\textsuperscript{16}Furthermore, one might say that additional such third-level boundaries of the elicitational type (turn boundaries) occur each time Avner returns to his narrative, following audience response. Also, third-level boundaries may occur simultaneously with second-level boundaries, such as at the beginning of the first sub-episode of a new episode. (Thus, the boundary preceding line 48 is a boundary between two episodes, as well as a boundary between the previous episode and the following first sub-episode of the next episode). In this study, however, if two boundaries of different orders occur simultaneously, only the higher-level boundary is counted. (Thus, the boundary before 48 is marked as a boundary beginning a new episode, not a new sub-episode). Similarly, at the continuation of a story following audience response, the third-level (turn) boundary, such as before line 21, is not counted if it co-occurs with a higher-level boundary (such as
following these turn boundaries in our narrative are generally of non-verbal nature, consisting mostly of laughter and sighs. Only one of them (38) is verbal, but minimally so, as it consists of the minimal response mhm. However, this was not the case throughout the data, as many narratives were interrupted by quite long elicitational segments of verbal nature.

8. Discourse markers in elicitation vs. narration: A quantitative perspective

One major difference between narration and elicitation concerns discourse marker density. Discourse marker density in narrational discourse is lower. The database shows a density of one marker every 4.2 intonation units on the average, as compared to one marker every 3.5 units in elicitational segments (see Table 2)

<table>
<thead>
<tr>
<th></th>
<th>Elicitation</th>
<th>Narration</th>
</tr>
</thead>
<tbody>
<tr>
<td>number of intonation units</td>
<td>539</td>
<td>559</td>
</tr>
<tr>
<td>number of markers</td>
<td>153</td>
<td>131</td>
</tr>
<tr>
<td>Density</td>
<td>3.5</td>
<td>4.2</td>
</tr>
</tbody>
</table>

Table 2: Discourse Marker Density

Examining the first column of Table 3 below, showing the number of boundaries found for each level of the two hierarchies (narration and elicitation) throughout the database, we see that during the 30 minutes of talk studied, the number of second- and third-level boundaries is much greater in elicitation as compared with narration (99+311=410 elicitational boundaries in 539 elicitational intonation units vs. 61+99=160 narrational boundaries in 559 narrational intonation units). Since the great majority of discourse markers (95%) are employed at frame shifts, the higher discourse marker density of elicitational discourse is related to the more frequent frame shifting which occurs in this type of discourse, due to the more interactive nature of moving through an elicitational topic.

the second-level boundary (episode boundary) before line 21). Such third-level boundaries often co-occur with episode boundaries, because episode boundaries in narrative tend to be points in the discourse at which we find audience response (Chafe 1987).

17 Examining the first line of Table 2, one notices that the number of elicitational intonation units is roughly equal to the number of narrational intonation units in the data. This is not representative of discourse in general, as mentioned earlier, but only of the present database. Similar numbers of intonation units of both natures allow a quantitative comparison of the two types of topic development investigated in this study. The discourse markers appearing in Table 2 do not total 336 (the total number of discourse markers in the data), but only 284, because many discourse markers occurred in short elicitational segments found in the midst of a narrative, such as minimal responses, etc. (as in line 38 here). These short elicitational segments were not included in the calculation of discourse marker density. Adding these elicitational intonation units would result in an even higher density of discourse markers in elicitational discourse.
The second column of Table 3 shows the number of boundaries with at least one marker for each level. On the whole, 42% of all boundaries show employment of at least one marker. Thus, discourse markers indeed play a major role in the contextualization of frame shifts. Furthermore, employment varies in a systematic way with respect to the level of the boundary across the two types of discourse. For elicitation as well as narration, we see that more second-level boundaries begin with a discourse marker than do third-level boundaries, (49% and 46% in level II vs. 38% and 39% in level III). In other words, speakers are more likely to mark beginnings of episodes (in narration) and subtopics (in elicitation) with discourse markers than they are to mark beginnings of sub-episodes (in narration) and turns (in elicitation) in this way. This supports the idea that second-level boundaries are more significant in interaction than third-level boundaries -- shifts in contextual constraints (Becker 1988) are greater there (Maschler 1991), and so is the need to create and reflect them via discourse markers.

On the other hand, these shifts in contextual constraints are even greater at first-level boundaries, at the beginning of a story (in narration) or a supertopic (in elicitation). Why, then, do we not find the greatest percentage of boundaries with markers in level I (we find only 44%)? In the case of the interaction examined here, for instance, the beginnings of both the story (line 18) and the following supertopic (line 76) show no employment of discourse markers. Perhaps the shifts at first-level boundaries are so clear, that there is no need to mark, or create them. In other words, the beginning of a story or a new supertopic is so obvious, that speakers do not ‘waste time’ marking it. If this is so, the difference in discourse marker employment between levels II and III is due to the function of discourse markers in creating and reflecting frame shifts, whereas the difference between level I on the one hand, and levels II and III on the other, has to do with the function of markers only in creating frame shifts.

The third column of Table 3 shows the number of boundaries with a discourse marker cluster (i.e., at least two consecutive discourse markers) at each level. We see significantly less clusters at level III in both types of discourse, particularly in elicitation:18 (8% and 6% at level III vs. 15% and 10% at level II, and 12% at level I). This is consistent with the

\[\text{Table 3: Distribution of Markers and Clusters at Boundaries}\]

<table>
<thead>
<tr>
<th>Type of boundary</th>
<th>boundaries</th>
<th>boundaries+ marker</th>
<th>boundaries + cluster</th>
</tr>
</thead>
<tbody>
<tr>
<td>I supertopic/story</td>
<td>25</td>
<td>11 (44%)</td>
<td>3 (12%)</td>
</tr>
<tr>
<td>II episode (narration)</td>
<td>61</td>
<td>30 (49%)</td>
<td>9 (15%)</td>
</tr>
<tr>
<td>III sub-episode (narration)</td>
<td>99</td>
<td>38 (38%)</td>
<td>8 (8%)</td>
</tr>
<tr>
<td>II subtopic (elicitation)</td>
<td>99</td>
<td>46 (46%)</td>
<td>10 (10%)</td>
</tr>
<tr>
<td>III turn (elicitational)</td>
<td>311</td>
<td>122 (39%)</td>
<td>20 (6%)</td>
</tr>
<tr>
<td>Total</td>
<td>595</td>
<td>247 (42%)</td>
<td>50 (8%)</td>
</tr>
</tbody>
</table>

\[18\] In this respect the elicitational segment examined in this study is not representative of the entire corpus: it exhibits many clusters at third-level boundaries.
Discourse markers at frame shifts in Israeli Hebrew talk-in-interaction

findings in the second column that level III shows less markers in general (not necessarily in clusters).

In Maschler 1994b I argued that discourse marker clusters result from shifts in constraints from a number of contextual realms, such that each marker in the cluster marks a shift in a different realm. If this is so, then we would indeed expect fewer clusters at lower-level boundaries as found in our database, because shifts in constraints from fewer contextual realms are involved there. Thus, the more frequent clustering of markers at first- and second-level boundaries in relation to third-level boundaries reflects the shifts in contextual constraints across more realms of context (Becker 1988) at higher-level boundaries.

Many questions for future research concern the nature of clusters: E.g., do markers indeed cluster such that there are no two markers from the same contextual realm? If not, as this text suggests (e.g., line 61: 'eh . s'tomeret ('uh . I mean', 2 cognitive markers), are there any constraints concerning which markers from the same realm may co-occur in a cluster? What about the order of markers within a cluster?

The next stage of this research project will be to investigate also whether boundaries vary with respect to the types of markers employed. Do turn boundaries, for instance, show a higher percentage of, say, interpersonal markers, than do episode boundaries? Or do episode boundaries show a higher percentage of referential markers, say, compared to sub-episode boundaries? These questions are interesting because they may shed new light on the precise ways in which contextual constraints interact to shape a text.

9. Conclusion: Discourse markers in talk-in-interaction

With the above qualitative and quantitative perspectives, we can begin to understand the role of discourse markers in creating and reflecting frame shifts in conversation.

Returning to Table 1, we see that in casual Hebrew conversation, significantly more markers operate in the realm of reference (136, 40% of all markers) than in any other realm. However, this is also the category exhibiting the smallest variety of markers -- only 8 different types. The most frequently mirrored referential relations between conversational actions are coordination (45 occurrences), consequence (44 occurrences) and contrast (24 occurrences). That contrast is so frequently mirrored is a grammatical reflection of the high tolerance for disagreement in Israeli discourse (Katriel 1986; Maschler 1994a, in press b).

The next largest category is that of interpersonal markers (114, 34% of all markers). In other words, one of the most common things an Israeli will do in casual conversation, in the move from one conversational action to the next, is attend to interpersonal matters. This supports Goffman's characterization of these boundaries in interaction as footing changes, focusing on the interpersonal dimension, at least for the present genre, in Israeli Hebrew. The variety of markers available for attending to interpersonal matters is by far greater than that found for any other category -- 35 different markers. In other words, many more ways of negotiating interpersonal relationships have been grammaticized in the language than ways of signaling semantic relationships between conversational actions, or ways of organizing their order and hierarchies. It is interesting that the most commonly used interpersonal marker in this culture, known for its above-mentioned high tolerance for disagreement in discourse, is actually ken of agreement ('yeah', 17 occurrences). A
reflection perhaps of what is popularly known as Israeli 'impatience' is the fact that the next most frequently employed interpersonal marker is nu ('go on', 12 occurrences).

The smallest category of discourse markers is the structural category (only 29, 9% of all markers). There are 12 types of structural manipulation of conversational actions in the database, including organizing their order, returning to a previous main action, introducing, summarizing or ending a conversational action. The most frequently employed structural discourse markers are rega ('one sec', 7 occurrences), zehu ('that's it', 6 occurrences), and bekitsur (and its variants) ('anyway', 6 occurrences).

Finally, cognitive processes are reflected at boundaries at a much lower frequency than the attending to interpersonal or referential matters (57, or 17% of all markers), but more frequently than the attending to structural matters. The cognitive processes reflected by these markers in the present database are: processing information, realizing new information, and the speaker's realizing the need to rephrase his/her utterance. The cognitive realm is qualitatively different since the majority of its markers (all those in the first two categories just mentioned) are devoid of semantic meaning. Indeed, it is not one of the contextual realms which, according to Becker (1988), shape text. The most common cognitive marker is e-h, reflecting the processing of information (25 occurrences).

These conclusions are, of course, particular to casual Israeli Hebrew conversation. While the frequency of discourse marker employment as a function of boundary level, as described in the previous section, is probably less language specific (a promising topic for future research), a table such as Table 1 can be thought of as a 'stripping down', or a description of the backbones of talk-in-interaction, by characterizing the frame shifts from one conversational action to the next in a particular genre of a particular language. Tables such as this one can be of use in the comparison of discourse across genres, languages, and cultures. They can serve as a window on what it is that speakers do most at frame shifts in different types of talk-in-interaction.

References


19Indeed, in Maschler in press a, I have used such tables to investigate which moves a Hebrew-English bilingual is more likely to accomplish in Hebrew, and which in English, in order to investigate the grammaticization of Hebrew discourse markers in the Hebrew-English mixed code, or emergent bilingual grammar.


Maschler, Yael (1994a) ‘Appreciation ha’arasa ‘o ha’aratza?‘ (‘valuing or admiration’): Negotiating contrast


Oz, Amos (1968) *Mixa'el Sheli* ('My Michael'). Tel Aviv: 'Am'Oved. (in Hebrew).


**Texts**

Discourse markers at frame shifts in Israeli Hebrew talk-in-interaction