Variation in list intonation in American Jewish English

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Abstract

Yiddish-influenced intonation has been previously noted as a potential defining characteristic of American Jewish English and, specifically, list intonation identified as a possible area of differentiation. However, apart from remarks in general descriptions of Standard American English (SAE) prosody, a systematic study of list intonation has not been conducted in SAE. In this study, lists were defined, and extracted from sociolinguistic interviews with Jewish women with varying degrees of exposure to Yiddish. Speakers from different language backgrounds differed significantly in their use of contours, boundary tones and pitch accents on list items, with speakers with less exposure to Yiddish using more of the standard English contour (H* H-L%) than speakers with more exposure to Yiddish. Yiddish bilinguals were more likely to use a rise fall contour (L+H* L-L%), fewer H-L% boundary tones and H* pitch accents, and more rising pitch accents (L+H* and L*+H) than non-bilinguals. In addition, speakers of all language backgrounds used a variety of list intonations, showing the need for more systematic study into the uses and meanings, social and otherwise, of list intonations in English.

Index Terms: list intonation, variation, Jewish English

1. Introduction

"List intonation" is, in some sense, a misnomer, as there are in fact several list intonations that have been described for American English. The distinction between the types has been said to be one of pragmatics: Ladd [1] notes two list intonations, one involving a rise, and the other, a high plateau, with the rising one being used for exhaustive lists (those which have listed all possible items) and the plateau being used for non-exhaustive lists (in which the items are taken to be merely representative of a larger set). The high plateau, H* H-L%, can be seen in figure 1: the pitch, starting at the stressed syllable and through the end of the intonational phrase, is generally high, and flat. However, more than two intonations can be used in lists in English, although their use has not been studied systematically: Schubiger [2], for example, describes five different patterns that can occur on "enumerations".

Intonation has been noted as a potential characteristic feature of American Jewish English speech: in studies of Orthodox Jewish communities, both Fader's [3] and Benor's [4] subjects claimed that they could tell if someone was Jewish by their intonation. It is unclear what, exactly, this distinctive intonation is: A "rise-fall" contour has been proposed as a feature of Jewish English as far back as 1956 [5]. However, this contour does not seem to be phonologically distinct, being ToBI transcribed as L+H* !H-L% [6], a contour which does exist and is used in Standard American English, usually as a vocative or some other stylized utterance [1]. It is more likely, then, that the differences in Jewish English intonation lie in either differences in
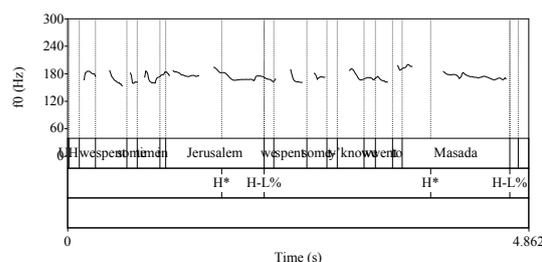

Figure 1: A standard H* H-L% on list items-"We spent some time in Jerusalem, we went to Masada"

phonetic implementation of contours, in differences in the use and meaning of contours, or both.

One potential area of difference is in lists: some Jewish speakers produced non-exhaustive lists that contained falls on non-final items (described as being rarer by Schudiger [2]), as in figure 2.The speaker is describing how Brooklyn has changed since she lived there: it has become cool, and that there's always something going on, "with artists, with music, with food, with breweries". Each phrase has a H* L-L% contour, with high pitch on the stressed syllable, which then falls to the bottom of the speaker's pitch range. These types of lists, with falling (or rise-falling), rather than flat, contours, sounded distinctly "Jewish" to some listeners.[1]
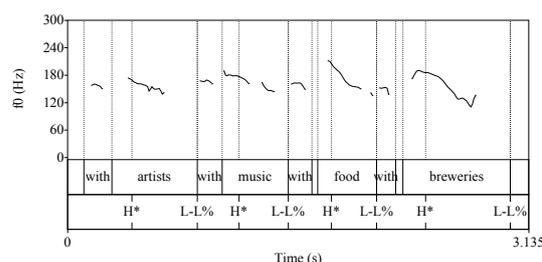

Figure 2: H* L-L% on list items

Data were analyzed from a series of sociolinguistic interviews to see if there was variation in list intonation between 10 Jewish women from the metropolitan NYC area. In addition, this study provides, as far as this author knows, the first systematic study of list intonation in any variety of American English.

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[1]I am grateful for participants at the Linguistic Society of America 2013 meeting for this observation.

2. Methodology

2.1. The interviews

Ethnographic-type interviews with 10 Jewish women were conducted in the metropolitan New York area. The sample is non-random, with most of the subjects recruited through personal contacts. The women varied in their degree of exposure to Yiddish and other varieties with significant Yiddish influence. Degree of exposure to Yiddish has been previously found to influence the use of Jewish English features. Jewish speakers with more exposure to Yiddish use forms that show more Yiddish-like traits (e.g., using a loanword like *schmooze* with its original Yiddish meaning of "chat"), and speakers with less use forms more like non-Jewish speakers (e.g., using *schmooze* to mean "network, chat up") [7]. As such, it was expected that the speakers with more exposure to Yiddish would show some influence of Yiddish in their intonation, while those with less exposure would behave more like Standard American English speakers.

Three of the women, the bilingual group, grew up bilingual in Yiddish and English, in neighborhoods in Newark and New York City that had large populations of Yiddish-speaking immigrants. However, it should be noted that these women were, at the time of the interview, English-dominant, with no noticeable Yiddish accent, beyond possibly their prosody. Three of the women, the mixed exposure group, grew up speaking only English, but had significant exposure to Yiddish-influenced varieties: one had Yiddish speaking parents and lived in a neighborhood in New York City with a large immigrant population; the other two spent significant amounts of time in Israel and reported high proficiency in Israeli Hebrew, whose prosody is almost certainly heavily influenced by Yiddish [8]. Finally, four of the women, the limited exposure[2] group, grew up monolingual in primarily English-speaking neighborhoods consisting mostly of second or third generation Americans.

As the target of investigation was potentially a socially meaningful one, it was thought that a more naturalistic setting, with a known interviewer, would prompt the subjects to produce more speech that was markedly Jewish, and indeed, most of the subjects, particularly when discussing Jewish topics, did, e.g., use Jewish English lexical items, mostly loan words from Hebrew and Yiddish. The interview as a whole centered around the interviewee's life, and contained several prompts that were amenable to list-type responses: e.g., What did you do for fun when you were younger? What sort of activities would you do in New York City? The interviews lasted around 45 minutes.

Subjects were recorded using a head mounted microphone with a digital recorder. Transcripts of the interviews were made using ELAN, and analyzed using PRAAT [9].

2.2. Extracting lists

Lists have been described in various ways, with some claiming that only two items are necessary to make a list [10]; and others, three, with three items tending to be preferred [11]. I follow Selting [12] in allowing several characteristics to define a list, with one exception: Selting cites prosody as factor in marking a sequence of items as a list; however, using prosody as a feature to define a list would be obviously problematic for this study. As such, lists were selected solely on the basis of the transcripts of the interviews.

A list was defined as a group of utterances of at least two items that were (1) non-temporally ordered and (2) displayed syntactic parallelism. Parallel NPs ("I had to buy everything-pillows, blankets, pots, pans...") and PPs (as in figure 2) were automatically included; parallel VPs and sentences needed to match in some other way besides simply being VPs and sentences, either (for sentences) by having some repeated part (e.g., "You could walk to Chinatown, you could walk over the bridge.."), or by having a similar argument structure (e.g., "We watched movies, we ate junk food..." but not "We had a lot of fun, we lived on a cul de sac, we used to play softball right in the street with our neighbors"). In addition, sequences of items concluded with a specific marker of list-hood, e.g., including a phrase like "and things like that", or, in one case, explicitly stating "we have a list", were included, regardless of whether or not the list items met the previous criteria.

Although previous studies have described lists as full, definable units, with the same prosody on each item apart from possibly the last (for example, Selting's study [12]), for this study, this was often not the case. While there seemed to be a preference for consistent prosody across list items, speakers did switch in the middle of a list. It was also difficult to determine what should count as a "list", singular. Take the following example, where a speaker is describing a part of Brooklyn:

(1)   1. You could walk to Chinatown
      2. You could walk over, over the bridge
      3. You can walk to work if you work downtown
      4. You could jog over the bridge coming home
      5. You had great restaurants
      6. You had, um, beautiful, beautiful brownstones
      7. And apartment buildings
      8. And as I said, tree-lined-
      9. Beautiful tree-lined streets.

The first four items are a list due to the syntactic parallelism, all being sentences starting with *you* + a modal; one could also perhaps include lines 5 and 6 due their starting with "you had", but here, the speaker has switched from listing attributes that were good about living near the Brooklyn Bridge to attributes that were good about the neighborhood in general. However, line 6 also seems to go with lines 7, 8, and 9, which are slightly different again: here, she's listing things that were attractive in the neighborhood, and has switched to listing NPs, as opposed to full sentences. Deciding whether this is one, two or three lists is non-trivial.

Similar problems can be seen in example 2, from a speaker describing her trip to Israel:

(2)   1. We spent some time in Jerusalem
      2. We spent some time in-
      3. We went to Masada
      4. We went to the Dead Sea...

The false start in line 2, with the same frame as line 1, indicates that item 1 is meant to be in a list; however, the speaker reconsiders, perhaps because it's not possible to "spend some time" in Masada[3], and sticks with this new frame for the rest of the list. It was decided, in this case, to include item 1, as some syntactic parallelism exists with lines 3 and 4 (simple past tense verbs, with a location), and it fit into the theme of the list – places this speaker had gone in Israel – quite clearly.

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[2]As opposed to no exposure group; these women would have had experience, for example, speaking to women in the first or second group, and had command over various Yiddish lexical items and other linguistic features that are a part of the American Jewish English repertoire

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[3]As it is a archeological site on a mountain, rather than a city.

Due to the problems of demarcating the lists as a whole, as well as the fact that often times, the lists did not have consistent prosody across all items, the results reported here are based on the list items, rather than by looking at the lists as whole units. This means, for example, that the entirety of examples (1) and (2) were included in the analysis, apart from those lines containing disfluencies at the end of the IP (example (1), line 8, and example (2), line 2).

The list items were extracted, and ToBI transcribed by the author based on the ToBI guidelines [13]. Due to the unscripted nature of the data, phonetic differences were not looked at this time; however, it is likely that they exist as, e.g., wider pitch range has been cited as a feature of Jewish English [14]. Uncertain transcriptions were discarded. Only list items ending with a full IP break were analyzed. Most of the time, there was a clean mapping of list item to IP; however, there were, at times, multiple IPs within a list item. These "extra" IPs were tagged as comments, and were excluded from the analysis. 504 list items were initially extracted; 467 were included in the analysis.

Lists were annotated for being exhaustive or not, as, as mentioned above, it has been claimed that exhaustive and non-exhaustive lists might have different prosody. An exhaustive list is one that a speaker intends to be a full account of possible items; a non-exhaustive list has items that are meant to be representative. Again, the distinction between exhaustive and non-exhaustive was based on the text, not on the prosody of the utterance, and fairly strict definition was used for "non-exhaustive": either the speaker had to name all items that could be in the list, or the speaker had to have stated that a specific number of items were in the list (e.g. "My three sons...").

List items were also annotated based on their position in the lists, first, medial, or last. For most of the lists, this was fairly straightforward; however, for lists like examples (1) and (2), the entire sequence of utterances was taken as one "list", and first, last, and medial were assigned accordingly.

3. Results

Table 1 gives an overview of the nuclear pitch accents and boundary tones used on the list items, sorted by language status; in this and the following tables, only the most common contours are shown for reasons of space. The limited exposure group preferred the contour previously noted for standard English, H* H-L%, shown in figure 1 above, with the H* !H-L% contour, consisting of a high tone on the stressed syllable and either a drop to a mid-range plateau, or a slight fall, shown in figure 3, as a slightly distant second.

Table 1: Nuclear pitch accents and boundary tones on list items

Bilinguals (n= 121)	Mixed (n=93)	Limited (n=253)
H* !H-L% (20%)	H* H-L% (26%)	H* H-L% (45%)
L+H* L-L% (15%)	H* L-L%(18%)	H* !H-L% (16%)
H* H-L% (15%)	H* !H-L% (12%)	H* L-L% (10%)
H* L-L% (14%)	L+H* !H-L% (11%)	L* H-L% (7 %)
L* L-H% (9 %)	H* L-H% (9%)	!H* H-L% (7 %)

The mixed and bilingual groups had more variety in their choice of pitch accents and boundary tones: For the mixed group, the H* H-L% contour, although a plurality of the contour types, was not close to being the majority, and, for the bilingual
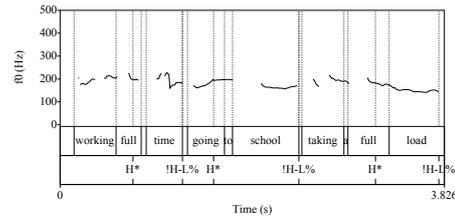

Figure 3: List items with H* !H-L%

group, the standard English contour tied with a rise-fall contour, L+H* L-L% (consisting of a sharp rise to the stressed syllable, then fall to the bottom of the speaker's pitch range, shown in figure 4) in second, with H* !H-L% ahead of it; preference was fairly evenly divided among the top 4 contours; again, cf. the limited group, which showed a clear preference for H* H-L%.
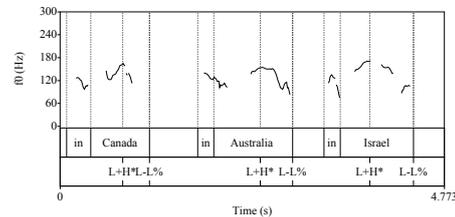

Figure 4: List items with L+H* L-L%

A logistic regression model was built using the contour type (H* H-L% or not[4]) as the dependent variable, as this is, as noted above, the contour previously noted for standard English, and also the contour that showed the most variance in use between the three groups. Language status, exhaustiveness of the list, and list position were included as fixed effects, and speaker as a random effect. Sum contrasts were used for all fixed effects. Log likelihood testing comparison revealed no significant differences between models including exhaustiveness and position and those without, so reports from the simplest model, with language status as a fixed effect, and speaker as a random effect, are included here. It was found that the limited exposure speakers and the mixed speakers were more likely to use the standard English H* H-L% contour (p<0.001, and p<0.01) than the average; the bilingual speakers were less likely to use the contour (p<0.001) than the average.

Another model was built using the L+H* L-L% contour or not as the comparison, as this was the second most used contour by the bilinguals, and showed, again, variance between the three groups. Position and exhaustiveness were found to be non-significant, and were removed from the model. The bilinguals used this contour significantly more (p<0.05), and the mixed group, less (p<0.05). The limited group also trended in this direction, but not significantly so (p = 0.0508). For the H* L-L% contour, no significant differences emerged for language status.

Table 2 shows the percentage of different boundary tones used by the speakers on list items. Again, a logistic regression model was built, using the same effects as above; however, neither position nor exhaustivetivity were significant. A log like-

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[4]Converting the data to binary variables was necessary; multinomial logistic regression models were attempted, but failed to converge, probably due to the amount of data.

lihood comparison between models with and without these effects was non-significant, so the results from the model with only speaker and language status will be reported. The boundary tones were converted to binary factors: use of H-L% or not (the standard English contour), and use of L-L% (the contour preferred by the bilinguals) or not. The mixed and limited group were more likely to use H-L% boundary tones (p<0.001 and p<0.05) than the average; the bilingual group was less likely (p<0.001). No significant difference was found for the use of the L-L% boundary tones.

Table 2: Boundary tones

Tone	B (n= 121)	M (n=93)	L (n=253)
H-L%	20 %	36 %	48 %
L-L%	36 %	28 %	26 %
!H-L%	26%	22 %	17%
L-H%	16 %	11 %	7 %
H-H%	2 %	2 %	1%

Table 3 shows the pitch accents used on the nuclear accent of the IP. The pitch accents were converted to binary factors: H* pitch accent (the standard, preferred by all groups) or not, and rising pitch accents (L+H* and L*+H) or not (as these seemed to be preferred by the bilinguals), and logistic regression models were run with the same fixed and random effects as above; in this case, position was found to be significant, but exhaustiveness of the list was not, and so position, but not exhaustiveness, was included in the model. For the first model, the H* pitch accent was more likely to be used for first items. Bilinguals were less likely to use H* overall (p< 0.01); the limited exposure group and the mixed group were more likely to use H* pitch accents overall (p<0.01 for both). For the second model, looking at the rising pitch accents (L+H* and L*+H), again, position was significant, with first and last items being less likely (p<0.01 and p<0.05) to receive rising accents than middle items. The bilingual group was more likely to use the rising pitch accents (p<0.01); the mixed group trended in this direction, but not significantly so (p = 0.059). The limited group was less likely to use these accents (p<0.01).

Table 3: Pitch accents

Pitch accent	B (n= 121)	M (n=93)	L (n=253)
H*	55 %	68 %	74 %
L+H*	20 %	15 %	7%
L*+H	10 %	5 %	0 %
!H*	10 %	3 %	7 %
L*	15%	7 %	11%

4. Discussion

Table 4 provides a summary of the findings above. The differences between the groups showed up as significant in the use of the H* H-L% contour, L+H* L-L% contour, H-L% boundary tone, and H* and rising pitch accents.

The mixed group overall, looked more like the limited exposure group than the bilingual group, with the exception of use of the rising pitch accents, where they were not significantly

different from the average, as well as in their use of the L+H* L-L% contour, where the limited group was not significantly different from the average. The mixed group, appropriate to their name, might occupy a space in between the bilingual group and the limited group in a very real sense, using mostly standard English prosody, but being able to adopt various features otherwise associated with the bilingual group when needed or wanted. The bilingual group, on the other hand, was markedly different from both groups. It is very likely that this difference comes from their Yiddish background. There has not yet been a systematic study of Yiddish prosody, so this remains speculative; however, the use of falling contours on lists has been noted in German [12], a language very closely related to Yiddish.

Table 4: Summary of findings: Use of contours, boundary tones, and pitch accents, compared to average. *(p<0.05), **(p<0.01), ***(p<0.001)

	Bilingual	Mixed	Limited
H* H-L%	less***	more **	more ***
L+H* L-L%	more*	less*	n.s.
H* L-L%	n.s.	n.s.	n.s.
H*	less**	more**	more**
L+H*/L*+H	more *	n.s.	less**
H-L%	less***	more*	more**
L-L%	n.s.	n.s.	n.s.

In addition to this variability across groups, there was considerable variation within the groups, as even the speakers with limited access to Yiddish showed some variety in the type of contours used: although the H* H-L% was preferred by this group, other contours were used as well. It is likely that some of these contours have a difference in meaning or use from the H* H-L% contour above: although exhaustivity did not come out as significant in any of the models, this may be due to the fact that in some cases, the list's status as either exhaustive or not might be marked primarily by the prosody, rather than being able to be extracted from the text string, and that the prosody was the only clue to exhaustiveness vs. non-exhaustiveness. However, this still leaves the question of what, for example, separates the H* H-L% lists from the H* !H-L% lists.

These findings also open up the possibility that, in addition to more pragmatic differences between the use of the contours, like exhaustive and non-exhaustive, there might be social meaning differences as well, with the use or non-use of certain contours perhaps marking a speaker as older, or Jewish. The differences might also have to do with attitudes towards the items being listed: for lists with falling contours, the speakers occasionally sounded dismissive, or annoyed. However, perception studies will be needed to more accurately study what these contours mean, both in terms of social meaning and other meanings.

5. Acknowledgements

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