

Sounds Heimish: A sociophonetic study of London's orthodox Jewish community

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ABSTRACT

This paper presents English, or *Judeo-English*, vowel production patterns by members of the Haredi Jewish community in Stamford Hill, north London, UK. The aim of the paper is twofold: to provide the first description of Judeo-English vowels as spoken in London's community; and secondly, to explore how community-specific gender differences influence vowel production patterns. Members of the community who have lived, studied and worked in Stamford Hill for either their whole lives, or from early childhood were recorded producing /i/, /ɪ/, /ɛ/, /æ/, /ɔ/, ʊ/, /u/ within words. Overall, the vowel production patterns showed little influence from surrounding London English varieties. An acoustic analysis of the first and second formant frequencies found a difference between men and women in their production of some vowels, reflecting their distinct language experiences. These findings highlight speech patterns in an understudied close-knit community, and illustrate factors that can influence phonetic variation in diaspora communities.

Keywords: Judeo-English, phonetic variation, gender, monophthongs

1. INTRODUCTION

The Jewish community of Stamford Hill, north London is the largest *Haredi*, or strictly orthodox Jewish community in Europe [12]. The community grew rapidly after the Second World War, with immigration from Central and Eastern Europe. The community is self-sufficient and very close-knit, with its own schools, businesses and charitable organisations. This has resulted in members having little need to interact with people beyond the metaphysical borders of Stamford Hill. This interdependence has also meant that access to the community is difficult, especially so for academic research [2]. While there has been some phonetic research on Judeo-English in the United States [4], to our knowledge there is no published sociophonetic study on the Judeo-English spoken in the Stamford Hill community, London, UK. The aim of the current study was therefore to provide the first descriptive study of monophthong production by adults in the

community, and an exploratory analysis of gender differences in vowel production.

Previous research has shown that tight-knit diaspora communities with a dominant heritage language (L1), can give rise to English speech production patterns that reflect the L1 [13, 14, 18]. These production patterns tend to be modulated by multiple factors such as home language environment (e.g., intergenerational living), educational experience, and more commonly explored factors such as age of arrival, and similarities and differences between the L1 and L2.

Speakers in the Stamford Hill Haredi community are mostly bilingual. Yiddish is spoken at home and in the community, however, gender plays a unique role in determining the language environment. Specifically, for men, Yiddish is typically their dominant language, whereas for women Judeo-English is the language of study and work [2]. During childhood, girls and boys only socialise within the nuclear family unit and are educated separately. Boys are mainly taught in Yiddish and read Hebrew and Aramaic texts, completing formal secular education at the age of 14. Girls are taught secular subjects e.g., mathematics, in English and sit their GCSE's and sometimes A-Levels. Women are also traditionally the breadwinners. This means that women in the community are predominately exposed to and use English and Judeo-English from the start of schooling and through their working lives, whereas men are typically primarily exposed to and use Yiddish, in their daily lives from childhood onwards [2].

In the current paper we explore how these community-specific gender differences in language environment influence the Judeo-English vowel production patterns. Men and women in the community were recorded producing seven monophthongs: /i/, /ɪ/, /ɛ/, /æ/, /ɔ/, ʊ/, /u/ within English words. All vowels are present in English and Yiddish, apart from /æ/ which is not present in Yiddish [15]. Based on the distinct language environment differences between men and women in the community, we predicted that men and women would display different English vowel production patterns. Specifically, men might reflect their Yiddish dominant environment, whereas women, who have comparatively more contact outside of the community, will show Judeo-English production patterns that present greater alignment with English

vowels, possibly as spoken in London. A second aim of this study was to compare, descriptively, the community production patterns to previous research on neighbouring London English varieties spoken in the North London Borough of Hackney [6, 9], to see to what extent, if any, the community has been influenced by local production patterns.

2. MATERIALS AND METHODS

This study had to contend with a number of unique factors when recording community members. The research took place during the Covid pandemic. UK Government restrictions at the time allowed the mixing of two households. A further consideration was the community’s cultural and religious restrictions, which had to be accounted for when designing the study. Haredi societies generally shun mass media and the internet. Members of the Stamford Hill community do not own smart phones or televisions, nor do they have internet access. This meant that interviews could not be conducted over virtual meeting platforms, such as Zoom. Due to these restrictions, recording devices were delivered to participants’ homes with instructions on how to operate the devices. The interviews with the researcher were then carried out over the landline telephone.

2.1. Participants

Nineteen adults (18–73 years old, median = 35 years, mean = 37.4 years, 10 women, 9 men) from the North London Stamford Hill Haredi Jewish community were recorded. All speakers lived in the community from birth (n =18) or from a very early age (n=1). Participants were bilingual, speaking Judeo-English and Yiddish. The primary home language of most speakers in this study was Judeo-English. All male participants used Yiddish on a daily basis. Subjects were recruited through the first author’s personal contacts and acquaintances.

2.2. Materials and procedure

All recordings took place in the participants’ homes using a Zoom H2n recorder with a sampling frequency of 44.1 kHz. The seven target vowels /i/ (FLEECE), /ɪ/ (KIT), /ɛ/ (DRESS), /æ/ (TRAP), /ɔ/ (THOUGHT), ʊ/ (FOOT), /u/ (GOOSE) were elicited within words in CVC stressed position, avoiding words with coda lateral or approximant. Participants read a total of 49 target words in the carrier phrase *say _____ again*. Speakers were asked to repeat the list in case of background noise or unclear diction. Recordings from 4 participants could not be used

because of excessive background noise, leaving the final analysis with data from 9 women and 6 men.

2.3. Acoustic analysis

A total of 736 tokens were analysed. The first (F1) and second (F2) formants were measured using Praat [5] with F1 and F2 measurements taken from the midpoint of the steady-state part of each vowel. Frequency data was normalised using NORM [8] using the Lobanov transformation [11]. This allowed data to be compared across men and women.

3. RESULTS

We first describe the overall vowel production patterns and the gender comparison. Separate mixed-effect linear regression models were run for F1 and F2. Fixed effects were gender (binary: men, women) and vowel, while participant was included as a random effect. Post-hoc group Tukey adjusted group comparisons were conducted, along with Cohen’s *d* effect size. All analyses were conducted in R [17] using the packages lme4 [1], CAR [7], and emmeans [10]. The second section of the results provides a short descriptive comparison with previous research on the neighbouring London English varieties. All vowels are described using Well’s Lexical Set [20]

3.1. Gender comparison

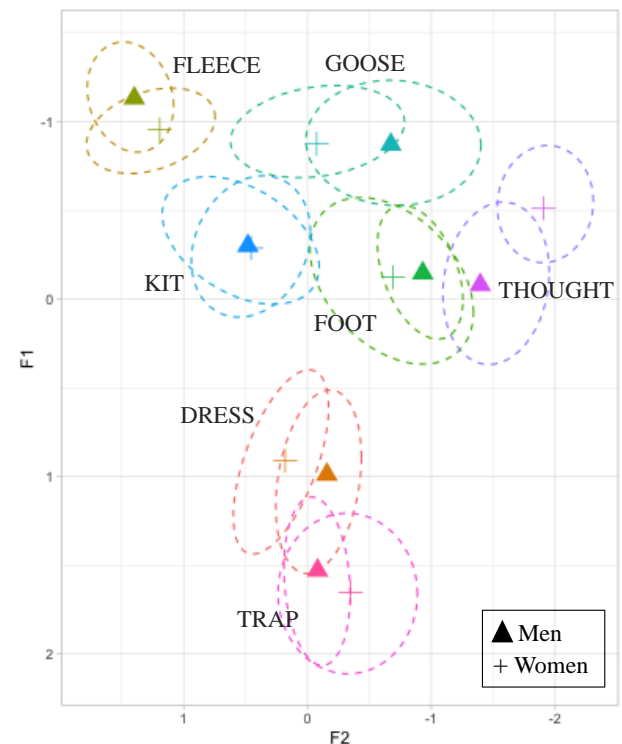


Figure 1. Vowel plot of the mean normalised F1 and F2 frequencies. The ellipses represent 95% confidence intervals.

Observation of Figure 1 shows differences and similarities between the gender groups. The women display more GOOSE-fronting than the men. The DRESS vowel is slightly more fronted for the women than the men, which is more central in the vowel space. The women's THOUGHT vowel is slightly further back in comparison to the men's THOUGHT. Additionally, the men's THOUGHT vowel is also slightly lower in the vowel space than the women. The ellipses of DRESS and TRAP overlap for the men, whereas as for the women these vowels are distinct. The remaining vowels, FLEECE, KIT and TRAP, did not display any marked difference in production between men and women.

The mixed model analysis revealed a significant main effect of vowel for F1 ($\chi^2(6) = 5404.18, p < .0001$) and F2 ($\chi^2(6) = 2681.22, p < .0001$), and a significant interaction between gender and vowel (F1: $\chi^2(6) = 43.20, p < .0001$, F2: $\chi^2(6) = 90.79, p < .0001$). Post-hoc group comparisons revealed a significant gender difference for THOUGHT in the F1 ($t(536) = 5.28, p < .001, d = 1.26$) and F2 domain ($t(536) = 4.72, p < .0001, d = 1.12$), with the women's production having a higher F1 (closer) and higher F2 (further back) than the men. There was also a significant gender difference in F2 for DRESS ($t(399) = -3.66, p < .01, d = -0.74$), and GOOSE ($t(536) = -5.53, p < .001, d = -1.32$). For DRESS, women had a higher F1 (more front) than men. For GOOSE, women displayed a lower F2 (more fronted) than the men. The men also displayed a significant overlap in F2 for TRAP and DRESS ($t(736) = -0.77, p > .05, d = -0.16$), but this was not the case for women who showed a distinct difference in F2 ($t(736) = 6.66, p < .0001, d = 1.16$). All other group comparisons were not significant.

3.2. Descriptive comparison with neighbouring London English varieties

Given the close-knit nature of the Stamford Hill community, a secondary aim of the project was to compare our data with previous descriptions of monophthong vowels as produced in the neighbouring London communities [6, 14].

One of the central characteristics of the neighbouring London English monophthongs, as well as many British English dialects, is GOOSE-fronting [6]. As can be seen in the Stamford Hill vowel plot (Figure 1), the GOOSE vowel in the Judeo-English as produced by the men in the community appears to be further back than the GOOSE vowel recorded in other contemporary London dialects [6]. To some extent, this is also true of the women. While they display a more fronted GOOSE vowel than the men, their production is still further back than has been found in other contemporary London varieties [6]. This shows

that the GOOSE vowel in Stamford Hill's Haredi community is moving forward, but at a slower pace than in neighbouring communities. Although to a lesser extent, the FOOT vowel has also seen a front movement in London and other British English dialects. This fronting is not apparent in our data, which shows FOOT as backed in the Judeo-English of Stamford Hill.

The data shows an overlap between DRESS and TRAP vowels in the formant values of some speakers from Stamford Hill. This was especially noticeable in the oldest speaker in our study, suggesting potential age-graded differences that require further investigation. The DRESS vowel in the Stamford Hill data is also considerably lower than in other London varieties and shows closer alignment with RP production patterns than London English varieties [6].

4. DISCUSSION

This study examined a linguistic community that has had limited exposure. Previous research on this community has focused on Yiddish dialects [3]; this study is the first to investigate the phonetic production of Judeo-English in the UK, in Europe's largest Haredi Jewish community [12].

The first objective of this study was to ascertain whether there is a gender difference in the vowel production of Judeo-English in Stamford Hill's Haredi community. The community's pedagogical approach to the genders means that Yiddish is the language of instruction and socialising for most boys and men, while girls and women mostly speak Judeo-English. The separation of the genders from a very young age and the disparate educational experiences of boys and girls, led to the prediction that there would be a significant difference in their vowel production. Our analyses found some significant differences in vowel production between the men and women in our study. The women displayed a more fronted GOOSE vowel in comparison to the men, with the women showing a closer alignment with neighbouring English varieties. We also found slightly more overlap between the TRAP and DRESS vowels produced by the men. A possible explanation for this pattern is there is no TRAP vowel in the Hasidic Yiddish vowel inventory and the closest approximation would be DRESS [15]. More generally, the gender disparity in the vowel production of the Judeo-English spoken in Stamford Hill may stem from the community's approach to employment. Women in traditional Jewish societies were expected to be the breadwinners so their husbands and sons could focus their attention on the study of Torah [16]. This has translated into the contemporary acceptance

of girls learning in English, so they are better prepared for the job market. Although most women work within the community, employment has resulted in slightly more interaction of women with people outside of the community. It is perhaps this point of contact that has prompted the developments that we find in the women's vowel data.

The second aim of this study was to provide a descriptive comparison with the neighbouring London English varieties spoken in Hackney. Our data showed closer alignment with more traditional vowel production patterns. This was particularly noticeable for the close-back vowels FOOT and GOOSE, which, for current SSBE and London dialects are nowadays more fronted [6, 14]. Despite the likely fronting in neighbouring dialects, the data from this study shows a further back GOOSE and to some extent the FOOT vowel in the Stamford Hill community. This degree of fronting is similar to what has previously been observed for older Cockney speakers in Hackney [19]. We also found that the DRESS vowel is lower in the Stamford Hill data and there is some overlap between the DRESS and TRAP vowels for the men. These data suggest that there is minimal influence from surrounding dialects. In many ways, these production patterns are not surprising given the close-knit nature of the community. There is little opportunity or need for speakers to interact with neighbouring communities, whether through work or education. Younger generations in Stamford Hill are taught by members of the same community, who themselves will have learnt English from second or third generation members of the same community. This suggests that the English spoken in Stamford Hill is possibly changing in approximate isolation; Stamford Hill's Jewish community is in some ways a linguistic island.

Research on immigrant minority language groups has shown that a move towards local varieties is typical by the second or third generation [13, 18]. Stamford Hill's Haredi community is now in its fourth and fifth generation from the point of immigration. The community's self-reliance and close-knit society means that the move towards dominant speech patterns outside of the community is progressing at a far slower pace than the norm. While not investigated in the current study, this adherence to a phonetic characteristic may also be a conscious choice on the part of the community to create a unique identity and sense of belonging among its speakers.

We have been privileged to record members of a community that is normally closed off to research. This inaccessibility has led to very little exposure and understanding of Judeo-English in the UK and we have just started to scratch the surface. Stamford Hill is in the position for researchers to examine both

extrinsic and intrinsic phonetic change in a traditional bilingual immigrant community.

5. REFERENCES

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