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What Predicts Pharyngeal Realizations in Bilingual Palestinians' Hebrew?

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Abstract

Palestinians in Israel are typically bilingual in Palestinian Arabic and Modern Hebrew. Two pharyngeal segments exist in both languages, exhibiting different variation patterns. Most Jewish speakers of Hebrew replace them with non-pharyngeals, whereas Palestinian speakers generally do produce pharyngeals in Arabic. We analyze the Hebrew component of an Arabic/Hebrew bilingual corpus of sociolinguistic interviews with Palestinian speakers from Jaffa, who produce some pharyngeals in their Hebrew. A multivariate analysis of the Hebrew data shows that higher rates of pharyngeal production in Arabic do not predict higher rates of pharyngeals in Hebrew, suggesting that the Hebrew patterns cannot be attributed solely to linguistic transfer. Taking into account social factors such as medium of education, we argue that the use of pharyngeals is not simply a carryover from Arabic, but rather a socially meaningful resource indexically linked to the speakers' Arab identity.

What Predicts Pharyngeal Realizations in Bilingual Palestinians' Hebrew?

Roey J. Gafter and Uri Horesh*

1 Introduction

In 1948, the modern state of Israel established itself over most of the historic land of Palestine, an event generally referred to by Palestinians as the *Nakba* (literally 'the catastrophe') and by Israelis as 'The War of Independence'. While the majority of the Palestinian population was expelled from Israel in the 1948 *Nakba*, some Palestinians remained, and they and their descendants form a sizeable minority in Israel's current population (roughly 20%). The Palestinian minority within Israel, unlike Palestinians in the West Bank and Gaza, are officially Israeli citizens. However, as Israel defines itself as a Jewish state, and is in conflict with most neighboring Arab countries, the status of Palestinians in Israel is precarious (Rouhana 1997), and they are socioeconomically disadvantaged compared to the Jewish majority (White 2012). The power asymmetry between Jews and Palestinians also translates to matters of language, on which we focus here. Jewish Israelis generally speak Modern Hebrew (MH), whereas Palestinians natively speak Palestinian Arabic (PA). From a legal standpoint, through most of Israel's history Arabic was nominally an official language alongside Hebrew, but that was in many ways lip service, and Arabic never had the same *de facto* status as Hebrew (Mendel et al. 2016). Furthermore, in 2018 the Israeli legislature made Hebrew the sole official language, enshrining the asymmetry in Israeli law.¹ On the ground, while most Palestinians in Israel are bilingual, using MH as well as PA in much of their daily lives, few Jewish Israelis can speak Arabic (Henkin-Roitfarb 2011).

Most research on MH sociolinguistics examines Jewish speakers of MH, with the large number of Palestinian speakers often overlooked. Although there is a growing body of research on MH as spoken by Palestinians, it focuses mostly on issues such as lexical borrowing and code-switching (e.g., Amara 1999, Mar'i 2013, Hawker 2013). Thus, there is relatively little quantitative information about the patterns of phonological variation among Palestinians. Of particular interest in this respect are the pharyngeal segments /ʕ/ and /ħ/. These two segments historically form a part of Hebrew phonology, but in MH as spoken by most Israelis, they are merged with non-pharyngeal segments (Gafter 2016a). Crucially, /ʕ/ and /ħ/ also occur in PA, in which they show no sign of disappearing (Horesh 2015). A common perception among Jewish Israelis is that producing the pharyngeals is a distinctive shibboleth indicating an 'Arabic accent' in Hebrew, a fact that can be seen in their common use in imitations of Arabs in Israeli media². This salient stereotype is not entirely unfounded: Henkin (1995) argues that a pharyngeal realization of (ʕ) and (ħ) in Hebrew is a frequent feature of L2 Hebrew among native speakers of PA, a fact she interprets as transfer from Arabic. However, we argue here that this is not the whole picture.

The data in this study draw on sociolinguistic interviews and ethnographic fieldwork conducted in Jaffa, a historically Palestinian city currently incorporated into the Israeli city of Tel Aviv. The bilingual speakers in our sample are quite different from those described by Henkin (1995): they are typically early bilinguals, and some of them are arguably no more dominant in PA than in MH; in fact, when speaking about their daily experiences using the two languages, some speakers reveal that they consider themselves native speakers of MH. It is in this context that we must understand

*The authors wish to thank Roni Henkin and Rebecca Lurie Starr for their helpful advice.

¹ The stripping of Arabic of its official status in Israel is one of the negative ramifications of the so-called Nation State Law. See, e.g., the following July 2018 report from *The Guardian*: <https://www.theguardian.com/world/2018/jul/19/one-more-racist-law-reactions-as-israel-axes-arabic-as-official-language> (accessed 26 July 2019).

² A recent example that was making headlines at the time of writing is the controversy surrounding Shefita, a Jewish contestant on Israel's Eurovision pre-selection show. She has become notorious for her racist imitations of Arabs, in which she uses pharyngeals across the board, even in English. In February 2019 the Israeli daily newspaper *Haaretz* published an article critiquing Shefita for speaking "in a hodgepodge of English and Hebrew, with an absurdly thick Arab accent." <https://www.haaretz.com/israel-news/eurovision/.premium-israelis-may-be-about-to-choose-a-pr-nightmare-to-represent-them-at-eurovision-1.6931479/1.6931479> (accessed 28 July 2019).

the sociolinguistic dynamic in Jaffa. Consequently, the variation observed within these speakers' MH should be seen as part of the broader array of variation in MH across all its speakers, especially since the pharyngeals, while rare, do occur in some varieties of monolingual MH. Therefore, for this community, there is no a priori reason to assume that transfer needs to be involved. Our quantitative analysis, in which we examine the potential correlation between the rates of these speakers' use of pharyngeals in MH and the rates the same speakers exhibit in PA, shows that one does not predict the other. We also find that the distribution of MH pharyngeals in the Jaffa sample is consistent with the linguistic patterning observed in monolingual MH. These two findings together are evidence against the hypothesis that the use of pharyngeals by Jaffa Palestinians is a result of transfer from PA to MH. This leads us to the argument that pharyngeals are a feature of Jaffa speakers' MH phonology, which serves as a socially meaningful part of their ethnolinguistic repertoire, an understanding which is in line with the speaker's own self-perceptions.

2 The Speech Community

Palestinians in Jaffa comprise approximately 39% of the city's population. The native language of Palestinians in general is PA, and the Jaffa community shares this trait. However, Jaffa Palestinians are typically bilingual: They speak both PA and MH. MH is pervasive in virtually all social context in Jaffa, and among Palestinians of all walks of life. The power asymmetry between Palestinians and Jews and the linked asymmetry between PA and MH (see Section 1) compel Palestinians to use MH whenever they interact with Jewish Israelis. And crucially, as we have observed ourselves through ethnography, and as reported to us in the interviews, members of the younger generation of Palestinians in Jaffa increasingly use MH among themselves in both spoken and written communication. Indeed, some of the speakers we interviewed considered themselves more MH-dominant, and even described themselves as native speakers of Hebrew.

An important characteristic of this community, which bears on the linguistic dynamic, is the multifaceted educational settings in which children are socialized. Municipally, Jaffa is coupled with Jewish-dominant Tel Aviv. As such, parents have a number of options regarding the schooling of their children. The majority send their children to local municipal Arabic-medium schools. In addition to Arabic, however, such schools often teach certain subjects, e.g., math and sciences, in Hebrew. Two additional types of schools are available in Jaffa: 'Jewish schools,' i.e., municipal schools consisting of predominantly Hebrew-speaking Jewish Israeli children, whose medium of instruction is Hebrew. It is not uncommon for Jaffa Palestinians to attend either the local Hebrew-medium high school or other Hebrew-medium high schools in Tel Aviv. Additionally, there are private 'Christian schools' run by churches. These schools typically use a combination of French, Hebrew and Arabic.

3 The Pharyngeals in Hebrew and Arabic

3.1 Pharyngeals in MH

In MH, both (ʕ) and (ħ) are salient sociolinguistic variables. While some varieties of MH retain /ʕ/ and /ħ/ as distinct phonemes, for most speakers they are merged with non-pharyngeal segments. Speakers who do not produce pharyngeals have merged /ħ/ with /x/³ and /ʕ/ with /ʔ/. Since /ʔ/ is itself typically deleted by Hebrew speakers (Bolzky 2003), the most common realization of (ʕ) is in fact full deletion.

Among Jewish Israelis, the pharyngeal consonants are strongly associated with ethnicity. In the Israeli context, the most salient ethnic distinction is that between the Jewish majority and the non-Jewish minority, most of whom are Muslim or Christian Palestinians. However, when Jewish Israelis talk about ethnicity, they specifically refer to groups within the Jewish community, often

³There are different phonetic accounts of the precise place of articulation of this MH phoneme. Some scholars (e.g., Blanc 1968, Yaeger-Dror 1988) describe it as a voiceless velar fricative /x/, while others (e.g., Laufer 1990) refer to it as a voiceless uvular fricative /χ/. For details see Gafter (2019), who discusses a voiceless trill variant as well. For the sake of simplicity, in this paper we use /x/ as shorthand for this phoneme and [x] for any non-pharyngeal realization of the MH variable (ħ).

conceptualized around a binary distinction between Ashkenazi Jews (of European descent) and Mizrahi Jews (of Middle Eastern and North African descent). The Ashkenazi-Mizrahi axis has ramifications for the socioeconomic evaluation of the two Jewish ethnic groups, as Ashkenazis show a tendency for higher income and levels of education compared to Mizrahis (see, e.g., Cohen et al. 2019).

The loss of pharyngeals in most varieties of MH occurred at the very outset of the engineered re-emergence of Hebrew as a modern language in the late 19th century. The effort to revitalize Hebrew was initially carried out by European Jews who natively spoke languages that do not have such segments in their inventories. In fact, liturgical Hebrew, as practiced for centuries in Europe by Ashkenazi communities, exhibited many traits of transfer from Indo-European languages among them the loss of pharyngeals.⁴ On the other hand, Mizrahi Jews were mostly speakers of Arabic varieties (e.g., Moroccan, Iraqi, Tunisian, Yemeni), which do have pharyngeals. Their liturgical traditions in Hebrew differed from the ones in Europe in a number of ways, among which was the preservation of [h] and [ʕ]. This preservation carried over into the MH spoken by many Mizrahi adopters of MH (Morag 1990). Nowadays, pharyngeal segments are virtually absent from the speech of Ashkenazi MH speakers, whereas some Mizrahi speakers maintain them. The pharyngeals are seen as the feature most closely associated with a speaker's Mizrahi origin (Matras and Schiff 2005). Even among Mizrahi speakers, however, the production of pharyngeals has been in decline over the years (Blanc 1968, Bentolila 1983, Davis 1984), to the point where most younger Mizrahi speakers typically do not produce them or do so rarely (Gaftar 2016a). Despite this decline in use, the pharyngeals are still a salient linguistic stereotype, and are enregistered (Agha 2003) as a Mizrahi feature (Gaftar 2016b). Among those Mizrahi speakers who use pharyngeals more robustly, (h) is more often realized as pharyngeal than (ʕ). However, among MH speakers who do not consistently produce pharyngeals, an occasional pharyngeal can still be used as a stylistic resource. For these 'occasional pharyngealizers,' the use of [ʕ] is far more common than [h] (Matras and Schiff 2005, Gaftar 2016a).

3.2 Pharyngeals in PA

The pharyngeal segments [ʕ] and [h] occur in PA too, but their distribution and patterns of variation in PA are different from that of MH. Horesh (2014) conducted fieldwork in Palestinian communities in Jaffa and the West Bank. Among all speakers in their sample, /h/ was categorically realized as [h], and was thus not a sociolinguistic variable, as is typical in Arabic across the Middle East.

Unlike /h/, (ʕ) in PA is variable. Alongside a pharyngeal realization, Horesh (2015) identified four lenited non-pharyngeal variants of (ʕ). Realizations ranged from pharyngeal ([baʕde:n] 'later'), glottal ([baʔde:n]), compensatory lengthening ([ba:de:n]), syllabic vocalization ([ba.a.de:n]) and full deletion ([baʔden]).

Horesh found that non-pharyngeal realizations in PA were more common in Jaffa than in the West Bank, due to extensive contact with MH in the former but not the latter. Yet while the higher degree of non-pharyngeal realizations in Jaffa is the outcome of linguistic contact with Hebrew, variation in (ʕ) occurs in various varieties of Arabic that have no contact with Hebrew, and can be seen as a general Arabic-internal phenomenon.

Among speakers from Jaffa, medium of education was found to be a significant predictor of the pharyngeal rates of PA (ʕ) (Horesh 2014, 2015); speakers who had an Arabic-medium educational background were shown to favor pharyngeal realizations of this variable, while speakers with at least some educational background in Hebrew-medium schools favored non-pharyngeal variants. We believe that, unlike the MH case, the variation we see in (ʕ) in PA occurs below the level of speakers' consciousness. In PA, pharyngeal [ʕ] is not socially stigmatized or negatively evaluated; it is, in fact, considered the norm, and its lenition or deletion seldom acknowledged within the speech community.

That (ʕ) is variable in both languages – with similar variants (most notably, [ʕ] and Ø) – while (h) is only a MH variable – with its main non-pharyngeal variant being [x] – is not surprising given

⁴See Blanc (1968) for the link between the ethnicity-based distinction of MH varieties and its connection with the revitalization of MH. Also see Reshef (2013) for the connection between this phenomenon and "European nationalism" and the revitalizers' European backgrounds.

the history of MH. The revitalizers of MH mentioned in Section 3.1 spoke European languages that had neither /h/ nor /ʕ/ in their inventories. While deletion of /ʕ/ appears to follow a cross-linguistic tendency, along the lines of the principle of least effort (see the discussion by Labov 2001:16–18), the replacement of /h/ by /x/ by these European speakers was not consistent with such tendencies; rather, they constituted adaptation of a Semitic phoneme to a sound more typical of Indo-European languages such as Yiddish and the Slavic languages they spoke natively. We argue that this explains the similarity between PA and MH in (ʕ) variation and the difference in the status of (h) as a variable between the two languages.

The different distributions of the pharyngeals as described above for Jaffa PA and Jewish varieties of MH, raise the question whether Jaffa speakers would use pharyngeals in their MH as well. As mentioned in Section 1, Henkin (1995) reports that pharyngeals occur in Hebrew spoken by Palestinians, but her data come mostly from predominantly segregated communities in Southern Israel. Since this linguistic dynamic is entirely different than that described for Jaffa in Section 2, there is no reason to assume that the linguistic patterns be the same. In the following sections we analyze the speech of Jaffa speakers and their use of pharyngeals in MH.

4 Methods

The sociolinguistic interviews analyzed in this study were conducted in Jaffa in 2004 and 2005 and analyzed for variation in the production of pharyngeals in PA (Hoesh 2014, 2015). Most of the interviews included two components: a short MH component, and a longer PA component. Originally, the MH portions of the interviews, lasting from 10 to 15 minutes each, were meant to function as methodological segues into the longer (30–45 minutes each) main interviews in PA and were used to assess the speakers' proficiency in MH for the purpose of creating a metric for language contact. Regardless of the original aims in including both languages in the interviews, the corpus we now have is a bilingual one, allowing us to examine the MH data included therein and comparing the patterns that emerge from the PA data, which had been analyzed previously.

The Jaffa sample collected by Hoesh included 24 speakers. However, since the current study requires production data in both MH and PA, we had to exclude three interviews in which the Hebrew component was not sufficiently substantial. Then, in order to balance the sample vis-à-vis gender, age and medium of education, 14 speakers were chosen for the present study.

The Hebrew component of each of the 14 interviews in the sample was coded auditorily for the dependent variables (ʕ) and (h). Each interview was coded separately by both authors, and had a very high rate of inter-rater agreement. Where such agreement was not initially achieved, the authors listened together to the questionable tokens until a consensus was reached for each of them. For each speaker, the first 30 potential environments of each variable were analyzed. In the case of (h), which occurs less frequently than (ʕ), a handful of speakers had fewer than 30 tokens; in these cases, we analyzed all available tokens. This amounted to 420 tokens for (ʕ) and 361 tokens for (h). For each token, we made a binary distinction between 'pharyngeal' and 'non-pharyngeal.' This coding scheme differs from that of Hoesh's original study of PA, but we chose to do so to be in line with the practice in other studies of pharyngeal variation in Modern Hebrew (e.g., Bentolila 1983; Gafter 2016a). For the variable (h), this meant [h] and [x], respectively. For (ʕ), similar to the variation found among Jewish speakers of Hebrew (Gafter 2016a), the two most frequent variants were [ʕ] and Ø, alongside occasional glottal stops – [ʔ] – which were lumped together with Ø as 'non-pharyngeal.'

5 Results

Combined, we identified and coded 781 tokens in the speech of the 14 speakers in the sample (420 for (ʕ) and 361 for (h)). The distribution of pharyngeal and non-pharyngeal realizations by medium of education for each variable is shown in Table 1.

Medium of education	% pharyngeal (ʕ)	% pharyngeal (ħ)
Arabic only	33.8% (81/240)	13.8% (25/181)
Mixed	32.2% (29/90)	15.6% (14/90)
Hebrew only	1.1% (1/90)	0% (0/90)
Total	26.4% (111/420)	10.8% (39/361)

Table 1: Pharyngeal realizations of (ʕ) and (ħ) by medium of education.

As Table 1 shows, the speakers in our sample do indeed produce some pharyngeals; however, the overall numbers are quite low, and the preferred realization is certainly not pharyngeal. Furthermore, (ʕ) is realized as pharyngeal more often than (ħ), unlike in the speakers' PA. Finally, the table suggests that pharyngeal rates are sensitive to the medium of education.

We carried out generalized linear mixed-effects regression modeling in R, using the `glmer` function of the `lme4` package (Bates et al. 2016). In addition to the educational variable described above, our multivariate analysis considered a random effect of speaker, and fixed effects of sex, age, and three phonological environments. The factors considered are summarized in Table 2.

Fixed effects	
<i>Social factors</i>	Medium of education (Hebrew, Arabic or mixed)
	Sex (M or F)
	Age (continuous)
<i>Linguistic factors</i>	Preceding vowel
	Following vowel
	Position in word
Random effects	
<i>Speaker</i>	

Table 2: Factors tested in glmer modeling of pharyngeal variation.

The only significant phonological predictor was whether the preceding environment was the vowel [a]. Table 3 summarizes all fixed effects in a generalized linear mixed-effects model that includes this phonological environment factor, along with the social factors and random effect specified in Table 2.

	Estimate	Std. Error	z value	p value
(Intercept)	-5.879	1.353	-4.343	<0.001***
Phoneme = (ħ)	-1.082	0.226	-4.782	<0.001***
Age	0.015	0.017	0.869	0.385
Sex = male	-0.436	0.652	-0.669	0.504
Education = Arabic	4.253	1.257	3.384	<0.001***
Education = Mixed	4.374	1.35	3.24	0.0012**
Preceding environment = [a]	-0.488	0.236	2.071	0.038*

Table 3: Summary of fixed effects in glmer model predicting pharyngeal variation.

As Table 3 shows, the higher rates of pharyngeal (ʕ) compared to (ħ) are statistically significant when controlling for other factors. Furthermore, medium of education is significant, with Arabic-only and mixed educational background speakers significantly more likely to use pharyngeals than speakers with a Hebrew-only educational background. Finally, a preceding vocalic environment of [a] significantly predicted less use of the pharyngeal variant. Other factors were not found to be significant.

The bilingual nature of the corpus allows us to perform a further analysis, testing more directly whether the data are indicative of transfer. Since in the PA of the speakers, (ʕ) also varies between pharyngeal and non-pharyngeal realizations, if the pharyngeals in MH are indeed the outcome of

transfer, we would expect pharyngeal rates in PA to predict those in MH. As /h/ is always pharyngeal in PA, only the rates of (ʕ) in PA can be used for this comparison. Therefore, we ran an additional model for (ʕ) only, which includes the Arabic [ʕ] rates for each speaker (as reported in Horesh 2015) as a predictor. As noted in Section 2, pharyngeal (ʕ) in PA correlates with medium of education. Medium of education is therefore excluded from this analysis, in order to avoid collinearity in fixed effects. As in the previous model, this model also includes age and sex as social factors, as well as the preceding phonological environment as a linguistic factor. The model is shown in Table 4.

	Estimate	Std. Error	z value	p value
(Intercept)	-2.271	1.626	-1.397	0.162
Age	0.029	0.03	0.934	0.35
Sex = male	-0.288	1.041	-0.276	0.78
Preceding environment = [a]	-0.835	0.324	2.58	0.0099**
Rate of [ʕ] in PA	-2.78	4.668	-0.596	0.551

Table 4: Glmer model of (ʕ) only, including PA rate of pharyngeal (ʕ) as predictor.

Once again, preceding [a] has a statistically significant effect. However, the rate of pharyngeal (ʕ) in PA is not a significant predictor of whether (ʕ) is realized as pharyngeal in MH. Thus, this analysis gives supporting evidence that the pharyngeals used by the Palestinian speakers in MH are not the outcome of transfer from PA.

Recall that in PA, (ʕ) exhibits a range of non-pharyngeal realizations, as described in Section 3.2. Therefore, the rates of non-deleted (ʕ), which include various lenited forms, are different than the rates of [ʕ]. As Horesh (2015) argues that this is evidence for the phonemic stability of /ʕ/ despite the preponderance of non-pharyngeal realizations, it is worth considering whether the rates of non-deleted (ʕ) are those expected to predict pharyngeal rates in MH. In order to test this, we ran a final model, shown in Table 5. This model is identical to the one reported in Table 4, except that it examines the rates of all non-deleted (ʕ) variants (as reported in Horesh 2015) as a predictor, instead of the rates of [ʕ] alone. As shown in Table 5, the results are essentially the same, lending further support to our argument, even when considering a somewhat different conceptualization of the structure of variation documented for these speakers' PA.

	Estimate	Std. Error	z value	p value
(Intercept)	-7.941	4.403	-1.804	0.071
Age	0.005	0.0317	0.16	0.872
Sex = male	-0.787	1.139	-0.691	0.49
Preceding environment = [a]	0.824	0.327	2.523	0.0116*
Rate of non-deleted (ʕ) in PA	7.478	6.166	1.213	0.225

Table 5: Glmer model of (ʕ) only, including PA rate of non-deleted (ʕ) as predictor.

6 Discussion

Based on the quantitative analyses in the previous section, we argue that the use of pharyngeals by Jaffa Palestinians in MH is not a straightforward outcome of linguistic transfer from PA. The first important finding is that speakers produce pharyngeal (ʕ) more often than pharyngeal (ħ). This is a pattern which is attested among Jewish speakers of MH (who speak no Arabic), and runs counter to the PA pattern, in which (ʕ) is often non-pharyngeal whereas (ħ) is categorically pharyngeal.

One might argue that this in itself is not unequivocal evidence, since if we consider the systemic difference between MH and PA in the respective status of each pharyngeal (see Section 3.2), an alternative account is also possible. For (ʕ), the patterns of variation in MH and PA are partly overlapping (inasmuch as the variation ranges from [ʕ] to \emptyset). Recall that /h/ is not variable in PA, and while both [h] and [x] occur, they are never variants of the same phoneme, unlike the case in Hebrew. If one takes the position that bilingual speakers' two languages constitute systems that mutually

influence each other (Paradis 2001, Simonet 2010), it is possible that speakers would have convergent representations of (ʕ), with the Hebrew [ʕ]~∅ alternation mapping onto the existing variation of (ʕ) in Arabic. Since the Hebrew variation [h]~[x] has no equivalent in PA, it might be easier for PA speakers to map the two onto a single Hebrew phoneme, realized as [x]. Therefore, a transfer account is potentially consistent with a preference for (ʕ) as well. However, we do not think that this is the case – although the speakers in our sample produce higher rates of (ʕ), they certainly produce pharyngeal (h) as well, suggesting a quantitative preference, not a categorical difference, between the two. More crucially, while the actual prediction for the relation between rates of (h) and (ʕ) may be up for debate, what is clear is that a transfer account would predict a correlation between rates in PA and rates in MH for (ʕ) (which is variable in both languages). Here the results are conclusive: in both analyses, there is no relation between the speakers' rates of pharyngeal (ʕ) in PA and MH.

Why then do Jaffa speakers produce pharyngeals? First of all, we must not lose sight of the fact that the pharyngeals are not foreign to Hebrew, and are present in the MH spoken by certain non-Arabic-speaking Israelis as well. As a native Hebrew feature, their distribution need not be modeled after their patterning in PA. Furthermore, recall that the speakers in the sample are early bilinguals, who are exposed to Hebrew and acquire it before they begin formal schooling. Some of them are by their own admission no more dominant in PA than they are in MH, and refer to Hebrew as a “native language.” There is no reason to assume that their MH would pattern like that of L2 Hebrew learners, for whom transfer from their L1 would indeed be expected to be a prominent factor affecting their MH production. We take the position that the more appropriate perspective through which their speech should be examined is that of an emergent native variety of Hebrew. Indeed, insights from our ethnographic fieldwork suggest that these speakers are not trying to adopt some ‘unmarked’ variety of Hebrew. Consequently, the pharyngeals can surface as a useful stylistic resource with which to do identity work.

It is well established that when a new dialect is formed in the context of immigration or colonialism, features that ultimately have their roots in a heritage or second language, can become ethnolinguistic features among subsequent generations of native speakers (see Fought 2003, Newman 2010, Sharma 2011, Starr and Balasubramniam 2019). These ‘exogenous’ features typically retain a social meaning associated with the language of origin, but from a synchronic point of view, they are not transfer. This is what we propose is at play here as well: the pharyngeals have become an ethnolinguistic resource indexically tied to the identity of Palestinians in Jaffa. While the pharyngeals' linguistic patterns do not follow those of PA, the social meaning does have everything to do with their occurrence in PA, and their association with it. In light of this, in order to understand the patterns of variation that we have observed, we need to look not at what these speakers do in PA, but at what types of social meanings they are conveying in MH.

With this perspective in mind, we can consider the effect of medium of education: speakers who went to Hebrew-medium schools produce pharyngeal realizations significantly less than those who went to other schools. These results may appear to be stemming directly from more exposure to Hebrew (and as such, consistent with a transfer account), but the importance of going to a Hebrew-medium school goes beyond more linguistic exposure to Hebrew. In recent studies of other speech communities, it has been suggested that the consideration of education as a sociolinguistic variable should go beyond the mere level of education and include a more fine-grained examination of type of education (see Prichard and Tamminga 2012, Sneller 2014, Prichard 2016; for Arabic in particular, see Haeri 1996, Al-Wer 2002). In Jaffa, going to a Hebrew-medium school entails immersion in Jewish Israeli society, and school choice reflects how one negotiates one's identities as a Jaffa Palestinian vis-à-vis the Jewish-Israeli majority. As a vehicle of socialization, Hebrew-medium education not only exposes children to a certain norm of linguistic input in MH, but also facilitates a kind of calibration of these children's sociolinguistic expectations and the ramifications of adhering to them. The lower rates of pharyngeals among graduates of Hebrew-medium education and socialization are the expected outcome, when considering the pharyngeals as an ethnolinguistic resource highlighting speakers' Arab identity.

The analysis proposed here also suggests an explanation for the preference for pharyngeal (ʕ) over (h). Gafter (2016a) argues that among Mizrahi ‘occasional pharyngealizers,’ (ʕ) is not only more frequent than (h), but also more closely associated with notion of Middle Eastern authenticity. It is no coincidence that both Mizrahis and Palestinians show a preference for the same pharyngeal segment. The Jaffa speakers use of (ʕ) is certainly not a claim for Mizrahi-ness, nor an emulation of

Mizrahi speech patterns. But as members of the greater MH speech community, they are aware of community norms and use sociolinguistic strategies that are consistent with them, and of the social meanings that they reflect. For both groups, (ʕ) is instrumental in distinguishing oneself from the ‘Westernized’ mainstream Israeli society, whose speech virtually lacks pharyngeals altogether.

7 Conclusion

In this paper we argued that the pharyngeals in the MH spoken by Jaffa Palestinians are best understood as MH variables used as a stylistic resource with indexical ties to Arab identity. This analysis is in line with the quantitative data, and no less importantly, with the speakers’ own self-perceptions. This study contributes to a growing body of literature that demonstrates how historically exogenous linguistic features can become nativized and become carriers of social meaning. That in Jaffa the linguistic patterns are not a direct carryover from PA would come as no surprise to members of the community itself. If anything, our conclusions actually call into question the widespread perception in Israeli society of Palestinians as necessarily L2 speakers of Hebrew, and the expectation that all variation be understood as an ‘Arabic accent.’

Our results highlight the need for more research on MH as spoken in a range of Palestinian communities. Our data come from a particular community, and we are by no means claiming that the linguistic patterns uncovered here are representative of the entire range of how Hebrew is spoken by Palestinians. The use of Hebrew by Palestinians in Israel spans the entire gamut of bilingualism, from basic proficiency in Hebrew to balanced bilinguals or even Hebrew-dominant bilinguals. For speakers such as those studied by Henkin (1995), treating Hebrew as an L2 is appropriate and a transfer account is likely; the Jaffa sample, conversely, represents a particular part of the bilingualism spectrum, one that we can think of as a native ethnolect of Hebrew.

Since research on Hebrew spoken by Palestinians tends to take a bird’s-eye view of the linguistic situation in a complex political setting, linguistic variation, especially among those Palestinians most likely to use Hebrew on a regular basis, is often overlooked. This paper demonstrates the importance of variationist studies focusing on Hebrew spoken by Palestinians not only by way of contrast with Hebrew, but also as meaningful sociolinguistic variation within Hebrew itself.

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