Traces of ‘gutturals’ in Modern Hebrew and implications for teaching

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A major objective of the mini-Ulpan is oral communication. Photos, pictures, cartoons, posters, card games, and other props can prompt the students to talk. For those students preparing to study in Israel, we discuss, using structured vocabulary, such functional areas as the university, shopping, the post office, transportation and other practical aspects of Israeli culture.

The prayerbook is also an excellent study resource as preparation for the Shabbat visit to a synagogue as a springboard for discussing and comparing religious traditions and customs in different cultures.

The mini-Ulpan is not a one-person operation. Graduates of the same "One-Year Program", who have studied in Israel for a year and have reached a high level of Hebrew are always ready to assist. For the student-staff members, the mini-Ulpan provides an excellent opportunity to use their knowledge of Hebrew, while gaining teaching experience.

The examination at the end of the two-week course is the placement test of the Hebrew University. As this is clearly an achievement test, it is a good indicator for the instructors as well as for the students of the level they have reached and of the effectiveness of the course.

**Summary**

After ten years it seems safe to say that the concentrated learning experience of the mini-Ulpan produces fast and significant progress, as well as a good social experience.

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**Traces of "Gutturals" in Modern Hebrew and Implications for Teaching**

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With the loss of low consonants or their mergers with other segments in Modern Hebrew (MH), their role in the phonological component requires reevaluation. In the case of $H$ (Het), for instance, the merger with $x$ (zaf) has indeed resulted in some degree of regularization. When it was pharyngeal, the difficulty in producing a low consonant at the end of a syllable that is not word-final (e.g. \siHqa 'she played') was circumvented by the insertion of a short $\ddot{a}$ so that this $H$ be at the syllable onset rather than in its coda. Since in MH $H$ merged with $x$, there is no longer need for $a$-epenthesis to prevent $H$ from occurring in this position:

- sixka 'she played' (less commonly sixaka)
- maxku 'they erased' (less commonly maxaku)
saxkan 'actor' (saxakan only in very formal register)

Similarly, vowels used to be lowered to a owing to the preference of low consonants for this low vowel; with the merger with x, some a's are raised to conform to regular canonical patterns from which they are supposed to have been derived. Thus, it is no longer necessary for the prefix vowel in the future tense of pa'al to be lowered to a owing to the presence of H; instead, it may (in some sociolinguistic circumstances) "revert" to the basic i of fully regular verbs:

exzik 'he held' ~ ixzik (cf. isbir 'he explained')
exlit 'he decided' ~ ixlit

Moreover, the stem-vowel in the future of pa'al does not have to be a when x from H is the second radical of the root. Depending on the particular sociolinguistic context, speakers also have the option of using the regular o alongside the "guttural"-related a:

yivxar 'he will choose/elect' ~ yivxor
yivxan 'he will examine' ~ yivxon

The "ex-guttural" impact is still strongly felt, however, in word-final position. It is manifest in choice of a rather than o in the future of pa'al,

yiślax 'he will send' ~ *yiślōax
yivrax 'he will flee' ~ *yivrōax

and in insertion of a if the preceding vowel is not a:

/salix/ 'messenger' > šalāx /samex/ 'happy' > samēāx

The previously-low nature of x from H is also maintained in the replacement of regular...ēet# by...ēat#:

šolāxat 'send (f.s)' (cf. kotēvet)
mefatēxat 'develop (f.s)' (cf. medabēret)

Since in most cases x that corresponds to the historical allophone of k can also occur in the same environments as x from H (except for the yivxar group above), x from historical pharyngeal H still requires marking in some way to account for these consequences.

The issue becomes more complex when other previously-low consonants are considered. In MH, the glottal stop ālef (=?) -- including the pharyngeal āyin (=) that merges with it -- is not realized phonetically, except as an optional onglide to a heavily stressed vowel:

me(?)ir 'give light' ta(?)/ut 'error'
vs. amar 'say' (never *?amar) ole 'go up, cost'
tōar 'degree' bēal 'owner, husband'

For many -- though by no means for all -- speakers, the glottal fricative he behaves similarly, except that optional realization as onglide to a stressed vowel would not normally result in merger with ālef, but rather in the underlying he being maintained:
arag 'killed' (never, or rarely, *harag)  nöag 'custom'
but ma(h)er 'quickly' rather than ??ma(?)er

Generally, then, ?,` and h are not realized phonetically. Phonologically, however, the ex-gutturals or their traces fulfill a role even if not realized, as occupiers of consonantal slots, to give speakers clues as to membership in canonical morphological patterns (binyan in the verb, miskal elsewhere), as well as to account for deviations from regular binyan or miskal patterns, owing to processes which were historically natural, but are no longer transparent.

There are essentially two ways of accounting for speakers' capability to relate deviant foons with formerly-low consonants to their regular binyan or miskal base. One is to start from abstract representations based on regular binyanim/miskalim, derive the forms concerned by means of morpho-phonological processes, then dispose of whatever is not realized phonetically. A glottal stop is articulatorily problematic at the syllable coda, and h and ` are not preferred in this position either. Assuming underlying low consonants would "motivate" the need to get rid of a low consonant at the syllable coda by removing it from the coda:

/macåa/? 'he found'  >  macåa  /maca?+ti/ 'I found'  >  macåtí
/gavâh/ 'he became tall'  >  gava (MH only)
/šama`/ 'he heard'  >  šama (MH only)

or by adding a vowel, which would shift that consonant to syllabic onset position:

/sö?el+im/ 'ask (m.p)'  >  šo?l+im > šo?alim > šoalim
(cf. /kotev+im/ 'write (m.p)'  >  kotvim)

and if a prefix is involved, it also echoes that vowel:

/ti+ `bod/ 'you will work'  >  ta`abod > taavod (cf. ti+xtov 'you will write')
/hi+ ?min/ 'he believed'  >  he?emin > eemin (cf. isbir 'he explained')
/mi+ `rav/ 'west'  >  maarav > maarav (cf. mi+zrax 'east')

A low consonant is also not allowed to cluster with another consonant in the syllable onset:

/`ašir+im/ 'rich (m.p)'  >  `širim > `aširim > aširim (cf. /zarîz+im/ 'nimble (m.p)'
/   >  zrizim)

/hlix+a/ 'walking'  >  halixa > alixa (cf. ktiv+a 'writing')

/ka?uv+im/ 'painful (m.p)'  >  k?uvim > ke?uvim > keuvim (cf. /katuv+im/ 'written (m.s)'  >  ktuvim)

/t+ `uf+a/ 'aviation'  >  te`ufa > teufa (cf. t+rum+a 'contribution')

and a word-final low consonant other-than-a-glottal-stop can be used to account for the "furtive patax," i.e., the insertion of a when historical final h, ` and H (see above) are preceded by a vowel-other-than-a:
This is an abstract approach, and in most cases is problematic in that it assumes underlying low consonants for which there is no sufficient synchronic motivation. Instead, one could argue that speakers refer to consonantal positions where the "gutturals" used to be, but not to actual "gutturals." From the speaker's point of view, the consonantal slot establishes a relationship between a form with a former "guttural" and its regular canonical base (be it binyan or miškal). It is not necessarily a derivational link; rather, it is the relatedness of sister-patterns, or pattern and sub-pattern. Insofar as the hearer is concerned, the assumption is that s/he identifies theoretical consonantal slots on the basis of surface configurations, with the help of which s/he identifies forms with former "gutturals" as constituting deviant realizations of prototypical word-formation patterns. These recognition strategies, or discovery procedures, have nothing to do with the feature 'low'; they only refer to consonantal slots, or positions. It is probably possible to design tests that will examine the assumption that the hearer forms surface-based strategies to recognize missing consonantal slots. Until a proper experimental framework is established, however, a number of common-sense hypotheses may be proposed as tentative discovery procedures:

(i) Any syllable-initial vowel is an obvious indication of a lost "guttural" that used to function as its onset:

- *amar* 'he said' ( < /?amar/)  
- *šual* 'fox' ( < /šu`al/)  
- *yedia* 'message' ( < /yedi`a/)  
- *eaxzut* 'settlement' ( < /he?axzut/)  

Exception: a preceded by a stressed vowel other-than-a and followed by a word-final x, where this a is epenthetic (i.e., does not constitute part of the miškal). Thus, šalāx is not interpreted as *šal?ax; its base is /šalix/.

(ii) When the syllable-initial and immediately-preceding syllable-final vowels are identical, the "ex-guttural" in between may be signalled by a long vowel in casual speech:

- *ta+avod* 'you (m.s) will work' > ta:vod ( < /ti+?vod/)  
- *e+evod* 'I will work' > e:vod ( < /?e+?vod/)  
- *revi+i* 'fourth' > revi: ( < /revi`+i/)  
- *šiamum* 'boredom' > šiimum > ši:mum ( < /ši`mum/)  

In very casual or fast speech, shortening (e.g. to tavod, šimum) is also possible, but is generally considered substandard; alternatively, it may be argued that a trace of length is always there, regardless of register. When the two adjacent vowels are identical and the first is prefixal, the second is epenthetic, while the first, which constitutes a component of the miškal, is underlyingly /i/ if it surfaces as a or e:
taavod 'you will work' ( < /ti+ `vod/)  
neelam 'he disappeared' ( < /ni+ `lam/)  
eevid 'he employed' ( < /hi+ `vid/)  
and /u/ if it surfaces as o:  
o+osak 'he was employed' ( < /hu+ `sak/)  

(iii) A word-final vowel (a or e, but theoretically it could be any) that is preceded by a stressed vowel in the preceding syllable signals a following (syllable-final) low consonant that has been lost:

téva 'nature' ( < /tiv`/)  
pére 'wild one, wildly' ( < /pir?/)  

(iv) When a word-final a that is not suffixal is immediately preceded by a stressed vowel other-than-a, it signals a following (syllable-final) lost "guttural," while the a itself is epenthetic (i.e., does not constitute part of the miškal):

yadúá 'known (m.s)' ( < /yadu`/)  
gavóá 'tall (m.s)' ( < /gavoh/)  
vs. hevi+a 'she brought'  
higíá 'he arrived' ( < /higi`/) vs. higí+a 'she arrived'

No consonantal slot is assumed for 'she brought' and 'she arrived' because the word-final a is suffixal.

To this point, the discussion has dealt with identification and characterization of underlying consonantal slots as a means to establishing relationships between deviant and regular word-formation patterns. The arguments centered on the hearer's point of view. Similar criteria may be claimed for production as well, but the production assumption -- i.e. that speakers also encode relationships of forms with former "gutturals" to regular prototypical patterns by employing abstract consonantal slots -- is naturally more speculative. These are purely linguistic issues. Their practical value for the instructor of Hebrew as a foreign language is mostly in helping students identify a formerly-"guttural" slot, usually without determining which particular one it would be, since there are many environments where no linguistically-significant differences exist between, say, élef and éyin. For the purpose of writing, however, additional specification is required. A separate question, then, is what clues native speakers use for writing, and how they narrow down the choice of a particular orthographic "guttural."

The degree of predictability here is rather limited, though. Some possible rule-of-thumb generalizations that teachers may use:

(a) In initial position, if the student suspects that the first syllable constitutes a prefix, éyin can be eliminated; if a prefix appears to be a first-person singular pronoun, the student should opt for an orthographic élef (orthographic symbols are in angled brackets):

< ? > extov 'I'll write'  
< ? > ezaxer 'I'll recall'  
< ? > adaber 'I'll speak'  
< ? > etlabeš 'I'll get dressed'
If an initial \( i \) appears to be a derivational verb-prefix, one opts for \( he \):

\[
\begin{align*}
&lt;?&gt; &amp; albi\&rsquo; &amp; 'I'll dress (tr.)' \\
&he<i> ilbi\&rsquo; &amp; 'he dressed (tr.)' \\
&he<i> itlabes &amp; 'he got dressed'
\end{align*}
\]

(b) An unstressed \( a \) in the final syllable of the word normally signals an orthographic \( \&yin \):

\[
\begin{align*}
na & & & 'shoe' \\
\&yin & & & 'nature' \\
\text{\&yin} & & & 'known'
\end{align*}
\]

(exceptions, like \( \&alef \) in \( \&i\&acirc;&nbsp;'degree' etc. and \( he \) in \( gav\&acute;\&rsquo;&lt;?&gt; 'tall' etc., are relatively rare). When such \( a \) is followed by (a word-final) \( x \), that \( x \) signals an orthographic \( \&het \) (e.g. \( sal\&acute;\&rsquo;&lt;?&gt;).

(c) an unstressed word-final \( e \) signals an orthographic \( \&alef \):

\[
p\&eacute;re&lt;?&gt; 'wild, wildly'
\]

In view of the strong preference of \( \&yin \) for \( a \) and a number of environments where \( \&alef \) is associated with \( e \), another possible pedagogical rule-of-thumb is that in the absence of any other clue, the neighboring vowel could determine the choice between these two consonants, i.e. \( a \) signals \( &lt; \) and \( e \) signals \( &lt;?&gt; \). There are so many exceptional environments to such a broad generalization, though, that its usefulness would be limited. Restricting this broad strategy to the very margin of the word -- the initial and final consonantal positions -- would be somewhat more reliable. However, even if one could somehow account for the still significant number of exceptional environments, there is still the major problem of separating between the cases that follow this generalization and the confounding effect of the numerous forms ending with a "silent" orthographic \( he \) that originated from \( /yl/ \). This rule-of-thumb might be worth considering only if students can easily identify a "silent" \( &lt;?&gt; \) by observing alternations with \( i \) or \( ey \) in the first and second person of the past tense.

The discovery procedures proposed above -- be they for phonological analysis or for orthographic choice -- were assumed for the purpose of accounting for encoding and decoding pattern relationships by native speakers. There is no \textit{a priori} reason, however, why they should not be used for students of Hebrew as a foreign language as well. Whether formulated in this fashion or in somewhat simplified form, they can all be applicable to any Hebrew-teaching classroom.