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Guttural Ghosts

Biblical Hebrew (BH) had a set of four guttural consonants $[?,h,\varsigma,\hbar]$. However, because the great majority of the initial and subsequent speakers of Modern Hebrew (MH) had no gutturals in their phoneme inventory, $[? and \varsigma]$ have not been rehabilitated, [h] is very rarely pronounced and $[\hbar]$ is pronounced as a velar [x]. In this state of affairs, it is surprising that the effects of the presence of gutturals **have been** rehabilitated (and productively so). See, for instance, (1). The aim of this talk is to uncover **how the guttural-induced regularities are conceptualized in MH without guttural triggers**.

(1) Historical gutturals surfacing as [a]

3msg.past	3pl.past		
a. ∫iper	∫ipru	'improve'	
b. lier	fi a ru	'estimate'	

b. fier fiaru 'estimate' *[fiGru] (guttural in coda) => [fiaru] At the heart of the talk stands the phonological puzzle presented in (2). The presence of the historical guttural at the right edge of (2a) is detectable through the presence of [a], as in (1) (cf. also 1a). In the suffixed form both the stem vowel and the [a] are absent, leaving instead only a syllable boundary pronounced as [?] in careful speech. Quadri-consonantal verbs such as (2b) do not allow the syncope of the second vowel, presumably because it would result in an illicit CCC sequence. If the second consonant of such verbs is a historical guttural, it is realized as an [a] again; in this case, the stem vowel does syncopate, presumably because there is no CCC cluster. The surprising form is (2d): in this reduplicated, guttural-second biconsonantal verb, the second guttural also surfaces as a syllable boundary, but unlike (2a) and (2c), here syncope is blocked. This seemingly marginal phenomenon is especially important for our purpose because it distinguishes MH from BH, where [e] never syncopates in such verbs.

(2) Guttural Puzzle

3msg.past	3pl.past	
a. ∫ige a	∫ig.u	'drive crazy'
b. ∫irb e t	∫irb e tu	'doodle'
c. ∫iab e d	∫ia bd u	'enslave'
d. ſiaſ e a	ʃiaʃ e u, *ʃiaʃ.u	'amuse'

The analysis adopts the proposal in Faust (2005), according to which there is an underlying /a/ in those positions where there was a guttural in BH. This idea is implemented in the framework of Government Phonology (Kaye et al. 1990). A main tenet of this theory is the right-to-left lateral force of government: if X is governed by Y to its right then the realization of X is inhibited. Some other important P(rinciples) are: P1) Following Kaye (1990), there are no underlying codas, only onsets and nuclei. Coda formation is the result of government from a following onset, which is only possible when the latter is followed by a vowel. P2) Rhymes may not branch on two levels: either the nucleus is long or there is a coda. P3) Onsets may remain onsets when not followed by a realized nucleus iff that nucleus is governed by a realized nucleus to its right. P4) A governing element can only govern one element at a time.

The guttural remnant /a/ is claimed to occupy an onset slot. The main proposal of the talk is: **the element /a/ is obligatorily governed by a following vowel.** For the suffixed forms in (2), it is assumed that [e] is not part of the representation. The representation of (2a) involves codaformation: the /a/ of /ʃigau/ is governed. This has two effects: i) /a/ is not realized, and ii) /g/ is a coda. In /ʃirbtu/, a sequence of three onsets cannot remain unaltered (**P3**). The nucleus after /b/ is realized, making /b/ a coda-governor and /r/ a coda. In /ʃiabdu/ and /ʃiaʃau/ the question

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of whether the sequence /ia/ is a hiatus or a diphthong becomes crucial. If it were a hiatus, there should be no difference between the two: in both, the third onset (/b/ and /ʃ/ respectively) would be legitimate as a coda because the following onset (/d/ and /a/ respectively) is followed by a vowel (P1). We would expect, contrary to evidence *[ʃiaʃ.u]. In contrast, if the /ia/ sequence is a diphthong and tautosyllabic, then the correct forms are predicted. Under this scenario, the third onsets cannot be codas, because of P2. They must remain onsets. In /ʃiabdu/, this is not a problem, because the intervening nucleus is governed from the right by /u/ (P3). But in /ʃiaʃau/, the /u/ governs the /a/. It cannot govern the empty nucleus after the /ʃ/ because of P4. This nucleus must therefore be realized, yielding the correct [ʃiaʃeu]. The representations of these last two words appear in (3):

(3) Consonantally-mapped /a/ is governed, preceding nucleus can't be



To conclude, "guttural"-induced sequences like /ia/ are treated like hiati or long vowels (in cases like [neelam] 'he disappeared' for instance), in that they do not allow coda formation. Secondly, MH does not have gutturals, but rather /a/ vowels linked to consonantal positions, whose realization is monitored by universal principles of government. No reference to paradigms or ad-hoc constraints is needed. This places the present analysis in sharp contrast to previous work (Faust 2005, Pariente 2012).

This perspective paves the way for many other analyses. Time permitting, I will touch on three further issues that can now be easily understood: 1) the appearance of [e] but not [a] in verbs like [iʃmeu], *[iʃmau] 'hear.3PL.IRREAL' vs. the possible appearance of both in verbs like [iʃ.alu]~[iʃ.elu]; 2) the non-syncope of the epenthetic [e] of initial clusters in sandhi when C₂ is a "guttural", [lexica] 'pressing' => [halxica]~[halexica], but [neila] 'locking'=> [haneila], *[han.ila]; and the issue of the historically guttural [x] in [pianeax] 'he deciphered' => [pianxu], *[pianexu].

References

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