A-coloring Consonants and Furtive *Pataḥ* in Biblical Hebrew and Aramaic According to the Tiberian Masorah

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Elisha Qimron's ארמית מקראית is an important work that contains many thought-provoking discussions. In this note, I would like to address three questions raised, directly or indirectly, by his brief discussion of furtive *pataḥ* (פתח גנובה). How did the Tiberian Masoretes pronounce furtive *pataḥ*? How did that pronunciation originate? Why is there no furtive *pataḥ* in the Biblical Aramaic m.s. suffixed pronoun הַ-?

The Pronunciation of Furtive *Pataḥ*

Qimron's description of furtive *pataḥ* begins as follows:

> It follows the vowel that precedes the guttural, and at the point of contact between the two vowels a glide is apparently formed, a kind of *yod* or *waw*, depending on the first vowel: רוּחַ (pronounced [rūʷaḥ]), רֵיחַ (pronounced [rēʸaḥ]).[1]

Here Qimron sides with modern Masoretic scholars against the great Semitists of the past, who asserted that furtive *pataḥ* is itself a glide—that it forms a diphthong with the previous vowel rather than adding a new syllable. Thus, Brockelmann describes furtive *pataḥ* as "a glide *a̯*, which, however, does not have syllabic character, but rather remains consonantal."[2] Bauer and Leander speak of "the falling diphthongs *ēa̯*, *īa̯*, *ōa̯*, und *ūa̯*, which are to be pronounced as one syllable."[3] According

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1   E. Qimron, ארמית מקראית (2nd ed.; Jerusalem, 2002), 32 §2.7.2.

2   C. Brockelmann, *Grundriss der vergleichenden Grammatik der semitischen Sprachen* (Berlin, 1908-13), 1.198.

3   H. Bauer and P. Leander, *Historische Grammatik der hebräischen Sprache des Alten Testamentes* (Halle, 1922), 169 §10a′.

to Joüon-Muraoka, furtive *pataḥ* "is used ... as a consonant, i.e., it forms a centering diphthong with the preceding vowel."[4]

There is undoubtedly some truth in the older view, at least from a diachronic perspective. Furtive *pataḥ* must have originated as an *a*-glide—a short, barely audible transitional vowel that arose now and then before certain final consonants. At that stage, it probably did form a diphthong with the previous vowel, as surmised by Brockelmann *et al.* Subsequently, however, it became so regular and so prominent that it came to be perceived as a separate syllable. This breaking of the vowel eventually gave rise to new transitional sounds—[ʷ] (in [uʷa] and [oʷa]) and [ʸ] (in [iʸa] and [eʸa]). In other words, one glide engendered another glide, and diphthongization begat triphthongization, e.g., [rūḥ] > [rūᵃḥ] > [rūɑḥ] > [rūʷɑḥ], and [rēḥ] > [rēᵃḥ] > [rēaḥ] > [rēʸaḥ]. A few medieval manuscripts (Tiberian and Babylonian, biblical and postbiblical) and many modern reading traditions go even further, to [ruwwaḥ] and [reyyaḥ].[5]

The Masoretes devised an ingenious way of indicating the presence of transitional [ʷ] and [ʸ] in their pointing. When the vowel before the glide was represented by a *mater lectionis* in the unpointed text, they frequently wrote the furtive *pataḥ* directly beneath it (e.g., רֵיחַ, רוּחַ, שִׂיחַ),[6] thereby reinterpreting the *mater* as a represention of the glide. The reinterpretation harmonizes the written textual tradition with the oral reading tradition.[7] It could be viewed as a *pro forma* attempt to

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4   P. Joüon and T. Muraoka, *A Grammar of Biblical Hebrew* (Rome, 1991), 87 §21c. The French original has "diptongue descendante" ("falling diphthong") instead of the incorrect "centering diphthong".

5   See S. Morag, לבעיית היכפלותם של הגיי-מעבר, *Tarbiz* 23 (1951-52), 236; id., העברית שבפי יהודי תימן (Jerusalem, 1963), 134; I. Yeivin, מסורת הלשון העברית המשתקפת בניקוד הבבלי (Jerusalem, 1985), 329; and various volumes of the series עדה ולשון.

6   See the pointing of these three words in the Aleppo Codex (www.aleppocodex.org). For discussion, see I. Yeivin, כתר ארם-צובה (Jerusalem, 1968), 21-22; and the literature cited in S. E. Fassberg, *A Grammar of the Palestinian Targum Fragments from the Cairo Genizah* (Atlanta, 1990), 100-101 nn. 123-26.

7   The reinterpretion of the *mater* in שִׂיחַ, etc. calls to mind the reinterpretion of the *mater* in IIIy segolate plurals like עֲפָאִים, צְבָאִים, פְּתָאִים. The written textual tradition presupposes a reading עֲפָאִים, צְבָאִים, פְּתָאִים, in which a

find the barest modicum of support in תורה שבכתב for a detail of תורה שבעל פה,[8] the masoretic counterpart of the talmudic אסמכתא.

One of the earliest explicit references to the *w*-glide that arose before furtive *pataḥ* is found in the lexicon of the Karaite David Al-Fāsī (tenth century). In discussing the pronunciation of *waw* in the name פֻוָה (Gen 46:13), Al-Fāsī writes:

Puvah. The name of a man, with the accent on the (syllable beginning with) *waw* ... and the *waw* is pronounced according to the view of the Palestinians, like that of הרוָה, דוָה, הוֶה.[9] Those of the teachers who read it like (the soft, bilabial *waw* of) רוּח and ניחוֹח are mistaken; for (the correct rule is that) every *waw* preceded by an accented letter (= syllable) is pronounced soft, between the lips, as in רוּח,

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sound change has replaced the original consonantal [y] with [ʾ], and the letter *yod* is a *mater* representing the vowel of the plural ending. However, the oral reading tradition inherited by the Tiberian Masoretes had a consonantal [y] in these words, reflecting the situation prior to the sound change—or else the restoration of that situation based on analogy with the singular. The Masoretes harmonized the two traditions by adjusting the pointing of the word so that *yod* represents the consonant [y] rather than the vowel [ī]. So too in שִׂיחַ, the Masoretes adjusted the pointing so that *yod* represents the glide [^{y}] rather than the vowel [ī].

8   The view that the vocalization of Scripture is (at least, to some extent) part of תורה שבעל פה is implicit in an anti-Karaite polemic quoted by al-Qirqisānī; see R. C. Steiner, "*Ketiv-Ḳere* or Polyphony: The שׂ-שׁ Distinction According to the Masoretes, the Rabbis, Jerome, Qirqisānī, and Hai Gaon," in *Studies in Hebrew and Jewish Languages Presented to Shelomo Morag* (ed. M. Bar-Asher; Jerusalem, 1996), *167-*168. The view is stated more generally and explicitly by R. David b. Solomon Ibn Abi Zimra in his responsa, part 3 § 643: ומסר הנקודות והטעמים כשאר תורה שבעל פה, שהיא פירוש לתורה שבכתב – כן הנקודות והטעמים הם פירוש לתורה שבכתב. והדבר ידוע כי האותיות בלא נקודות וטעמים יש בהם משמעיות הרבה וצירופים שונים וקריאות הפכיות, ולכן לא ניתנו הנקודות והטעמים ליכתב בס"ת. ויכתבו בחומשים משום עת לעשות לה', כדי שלא תשתכח תורת הקריאה, כשאר תורה שבעל פה. I am indebted to Leon Well for calling this responsum to my attention.

9   The *waw* in these words (as in most words) was pronounced [v] by the Palestinians. By contrast, the Babylonians realized every *waw* as [w]. See I. Eldar, חוק אוי"ה ובגדכפ"ת, *HUCA* 55 (1984), יא-י; and G. Khan, "The Tiberian pronunciation tradition of Biblical Hebrew," *Zeitschrift für Althebraistik* 9 (1996), 6.

ניחוֹח, יְהוֹשֻׁעַ, לָנוּעַ, שָׁמוֹעַ, יָדֹעַ, נֹחַ, מֹחַ and the like, but (the *waw* of) a word whose accent is on the (syllable beginning with) *waw* itself is pronounced like every *waw* for us ... between the upper teeth and the lower lip...[10]

Even earlier evidence for a *w*-glide before furtive *pataḥ* comes from a Masoretic note in Codex Cairo (896 C.E., according to the colophon)[11] at Ezek 23:23. It compares the pronunciation of the medial *waw* in וְקוֹעַ to the one in וּפֻנֶה, putting a *rafeh* over both.[12] The most exotic evidence for the *w*-glide comes from Chinese transcriptions of some biblical names in the Kaifeng synagogue inscriptions of 1489 and 1512: *Nü-wa* = נח (cf. Yemenite *Nö:waḥ, Nöwwaḥ*)[13] and *Yüeh-shu-wo* = יהושע.[14]

The Origin of Furtive Pataḥ

How did the original *a*-glide arise? The answer lies in the *a*-coloring effect of consonants produced with constriction of the lower pharynx. This effect is a universal tendency, not limited to the Semitic languages. Nootka, an American Indian language whose consonant inventory has much in common with Semitic,[15] has a glottal (more precisely: epiglottal) stop produced with pharyngeal constriction[16] and a glottal fricative

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10 My translation is based on the textual reconstruction and punctuation of Yeivin, כתר ארם-צובה, 66.

11 For the authenticity of the colophon, see A. Dotan, ניצנים ראשונים בחכמת המילים (Jerusalem, 2005), 63, and the literature cited there.

12 Yeivin, כתר ארם-צובה, 66. The exceptional pronunciation of פֻנֶה that Al-Fāsī considered mistaken was the norm among the Masoretes and even among the Samaritans. The bilabial realization of *waw* was preserved by a preceding [u], because the latter is also bilabial. See Z. Ben-Ḥayyim, עברית וארמית נוסח שומרון (Jerusalem, 1957-), 1.178, 5.22; and R. C. Steiner, "Ancient Hebrew," in *The Semitic Languages* (ed. R. Hetzron; London, 1997), 147.

13 Morag, העברית, 134.

14 R. C. Steiner, *Affricated Ṣade in the Semitic Languages* (New York, 1982), 12.

15 See R. C. Steiner, *The Case for Fricative-Laterals in Proto-Semitic* (New Haven, 1977), 9, 38.

16 See J. H. Esling, K. E. Fraser, and J. G. Harris, "Glottal Stop, Glottalized Resonants, and Pharyngeals: A Reinterpretation with Evidence from a Laryngoscopic Study of Nuuchahnulth (Nootka)," *Journal of Phonetics*

produced with pharyngeal constriction, written ʾ and ḥ respectively by E. Sapir.[17] W. H. Jacobsen reports that "these consonants have an *a*-timbre, and color and lower, or add an *a*-glide to, following high vowels."[18] This is based, in part, on an observation of Sapir: "*o·* and *ʋ* are often broken to *ɔu*, *au* and *εi*, *ai* after ḥ and ʾ."[19] Here we see that the glide may sound like [a], [ɔ], or [ε].

The *a*-timbre of pharyngeal consonants and the *a*-glide that they generate are explained by P. Delattre:

> A pharyngeal articulation is one in which the root of the tongue assumes the shape of a bulge and is drawn back toward the vertical back wall of the pharynx to form a stricture...
> The best example of a pharyngeal articulation is the vowel /a/... [F]or an /a/ the tongue root bulges toward the back wall of the pharynx.[20]

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33 (2005), 396: "Auditory and acoustic evidence has long suggested that there is a stop component in /ʕ/ (Rose, 1981), usually thought to be a glottal stop. Jacobsen (1969, p. 125) and Stonham (1999, p. 10), both citing Sapir, call /ʕ/ a pharyngealized glottal stop. Our laryngoscopic observations confirm that this is not just a glottal stop but also a full closure of the laryngeal constrictor, that is, a voiceless epiglottal stop [ʡ] with a voiced pharyngeal offglide [ˤ]." For the plosive [ʕ] of Iraqi Arabic and Chechen, see S. H. Al-Ani, "An Acoustical and Physiological Investigation of the Arabic /ʕ/," in *Readings in Arabic Linguistics* (ed. S. H. Al-Ani; Bloomington, Indiana, 1978), 89-101 (reprinted from *Acts of the Xth International Congress of Linguistics* [Bucharest 1967]); and J. Nichols, "Chechen Phonology," in *Phonologies of Asia and Africa* (ed. A. S. Kaye; Winona Lake, Indiana, 1997), 2.944.

17 These signs are more or less equivalent to ʿ and ḥ used by Semitists and ʕ and ħ used by phoneticians, except that ʿ and ʕ are non-committal with respect to manner of articulation.

18 W. H. Jacobsen, "Origin of the Nootka Pharyngeals," *International Journal of American Linguistics* 35 (1969), 126.

19 E. Sapir, "The Rival Whalers: a Nitinat Story (Nootka Text with Translation and Grammatical Analysis)," *International Journal of American Linguistics* 3 (1924), 89 n. 54.

20 P. Delattre, "Pharyngeal Features in the Consonants of Arabic, German, Spanish, French, and American English," *Phonetica* 23 (1971), 129. In an email dated Feb. 24, 2006, M. Yaeger-Dror notes that in writing /a/ rather than /ɑ/ Delattre is merely following the phonological conventions

> The pharyngeal vowel /a/ ... is characterized by a very high 1st
> formant at about 750 cps and a rather low 2nd formant at about
> 1,300 cps. First and 2nd formants are, therefore, close together.
> This is the typical effect of pharyngealization, not only in vowels
> but in consonants as well. On spectrogram, *consonants* with a
> pharyngeal stricture can generally be recognized by a postvocalic
> rise of the 1st formant transition and a postvocalic fall of the
> 2nd formant transition which bring the 2 formants close together;
> and in prevocalic position, naturally, the reverse is true...[21]

Thanks to this *a*-timbre and/or *a*-glide, [ʿ] and (less frequently) [ḥ]
have often been transcribed with *a* and Greek α (alongside ε). The
examples presented below are drawn from a wide variety of Semitic
languages and periods, and they contain pharyngeals in both syllable-
initial and syllable-final position.

We begin with the trilingual inscription of ʿĒzānā king of Aksum,
where the Greek rendering of the Ethiopic royal name is Αειζανας
(4th century C.E.).[22] Similarly, in bilingual texts from Palmyra, we
find Αβδαασθω[ρο]ν = עבדעסתור (99 C.E.), Ααιλαμειν = אעילמי (139
C.E.), Μαεναιου = מעני (267 C.E.), Σαεδε[ι] = צעדי (166 C.E.), etc.[23]
So too at Shivta, a Nabatean site in the Negev, the personal name ʿĪd
is rendered Αεδος (415-435 C.E.?).[24] At Nessana, another Nabatean

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of his day; the context makes it obvious that he is discussing a back
vowel.

21   Delattre, "Pharyngeal Features," 131.

22   E. Littmann, *Sabäische, griechische, und altabesinische Inschriften*
(Berlin, 1913), 4. The *a*-timbre of Ethiopic [ʿ] is also seen in the Geez
letter-name ʿ*ayn*, where the normal contraction of [ay] to [ē] has not
taken place. Presumably the lowering effect of the [ʿ] counteracts the
raising effect of the [y].

23   D. R. Hillers and E. Cussini, *Palmyrene Aramaic Texts* (Baltimore, 1996),
36, 66, 69, 103. In the last two examples, I assume that there is no vowel
following [ʿ] and thus that ε must represent the pharyngeal consonant.

24   L. Di Segni, "Dated Greek Inscriptions from Palestine from the Roman
and Byzantine Periods" (doctoral dissertation, Hebrew University, 1997),
821-22, 914. The pronunciation in Nabatean Aramaic may have been
closer to [ʿēd] or even [ʿed]; see Jastrow, *Dictionary*, 1067 s.v.

site there, *Mas⁽ᶜ⁾ūd* appears as Μασαουδ (7th century C.E.).[25] A search of the Internet reveals that these last two transcriptions are still very much alive today! The name *Mas(s)aoud* is quite common, especially in French-speaking countries,[26] and it is a component of several toponyms: *Hassi Massaoud* (Algeria), *Cheikh Massaoud* (Syria), and *Tell Massaoud* (Syria). The word *ᶜĪd* "feast, holiday" appears very often on the Internet as *Aid*, e.g., *Aid a/el-K(a)bir*.[27] Similarly, *Jum⁽ᶜ⁾ah* "Friday" appears there frequently as *Jumaa(h)*. An example of final [ᶜ] on the Internet is Arabic *mamnūᶜ* "forbidden"; it appears often as *mamnua* or *mamnua'*, and even occurs in the title of a music CD: "Kulu hatha mamnua" (popularly translated, "everything fun is forbidden").

Syllable-initial [ḥ] and [ᶜ] in the Septuagint are represented by α in Αερμων = חרמון, Ισαακ = יצחק, Βαλααμ = בלעם, Γαλααδ = גלעד, Σεννααρ = שנער, Φαραω = פרעה, Γαβαων = גבעון, Φαγαιηλ = פגעיאל, etc. They are represented by ε in Ελεαζαρ = אלעזר, Φινεες = פינחס, Γεδεων = גדעון, etc. For final [ḥ] and [ᶜ] in the Septuagint, we find α mainly in late books, e.g., Βερια[28] = בריח (1 Chr 3:22), Νσια = נציח (Neh 7:56), Ιεδδουα = יַדּוּעַ (Neh 10:22). In other books we find ε, e.g., Νωε = נח, Μανωε = מנוח, Αλαε = חלח, Γελβουε = גלבע, Θεκουε = תקוע, Ωσηε = הושע, Βηρσαβεε = באר שבע. An example of final α from a source close to the Septuagint in time and place is Ραφια = רפיח (Eg. *Rpḥ*, Akk. *Rapiḫu*) in Polybius's *Histories* (5.80.3 and 5.86.2-8).[29] An example

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25 C. J. Kraemer, *Excavations at Nessana*, 3 (Princeton, 1958), 355; B. S. J. Isserlin, "The Nessana Papyri," *The Annual of Leeds University Oriental Society* 7 (1969-73), 22.

26 Cf. the woman's personal name *Messaouda* given together with its Arabic spelling by G. El Khayat, *Le livre des prénoms du monde arabe* (Casablanca, 1996), 226.

27 I first encountered this transcription in Abbas, *Allah o Akbar: A Journey Through Militant Islam* (London, 1994), 189: "A sheep is slaughtered in Paris for Aïd al-Kabir, which marks the end of the *Hadj* season." Note the diaeresis, similar to the one in *naïve*.

28 So in codex A.

29 Note that the final α cannot be a rendering of the Aramaic definite article, for the latter is not used with this toponym. In Onqelos (Deut 2:23), we find רפיח, and in Pseudo-Jonathan (Deut 2:23), כופרניא דרפיע. (The latter form exhibits the Galilean Aramaic merger of /ḥ/ with /ᶜ/;

with final Latin *a* is *lua* = לח "tablet" in a Neo-Punic inscription from Roman Tripolitania (North Africa).[30] Similarly, the Latin epitaph on a Jewish tombstone from Venosa (Italy; mid-late sixth century) calls the deceased *Gesua* = ישוע "Jeshua."[31]

There may be renderings of [ᶜ] with *a* already in the Murašū archive from Nippur (fifth century B.C.E.) in names based on the root שמע "hear." One of these is *Šá-ma-aḫ-ú-nu* = שמעון.[32] At first glance, this appears to exhibit *ḫ* = ע, as elsewhere in this archive and other Late Babylonian sources.[33] However, the scribe writes *ma-aḫ*, as if there were a vowel after the [m]; contrast Old Babylonian *Sa-am-ḫa-nu-um*.[34] Put differently, here Northwest Semitic [ᶜ] seems to be rendered with Late Babylonian *aḫ*. This may reflect an attempt to capture both the guttural consonant and its *a*-timbre.[35] Another possible example is the name *Sa-mu-ú-a*.[36] H. V. Hilprecht and A. T. Clay identified this name with biblical שַׁמּוּעַ, but added a question mark.[37] M. Lidzbarski bolstered this identification by pointing to other names on the *CaC(:)u:C* pattern

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see E. Y. Kutscher, *Studies in Galilean Aramaic* [trans. M. Sokoloff; Ramat-Gan, 1976], 70-78.)

30 C. R. Krahmalkov, *A Phoenician-Punic Grammar* (Leiden, 2001), 32. The full phrase is *[f]el lua y* "made (sg.) this tablet," to which we may compare *felu tabula y* "made (plur.) this tablet" = *hanc t[ab]ulam instituerunt* in a bilingual (Punic and Latin) Tripolitanian inscription published in C. R. Krahmalkov, "Notes on Tripolitanian Neo-Punic," *JAOS* 114 (1994), 453, 455.

31 D. Noy, *Jewish Inscriptions of Western Europe* (Cambridge, England, 1993-95), 1.125-27.

32 H. V. Hilprecht and A. T. Clay, *Business Documents of Murashû Sons of Nippur Dated in the Reign of Artaxerxes I* (The Babylonian Expedition of the University of Pennsylvania, Series A, Cuneiform Texts, vol. 9; Philadelphia, 1898), 27, 70; R. Zadok, *The Jews in Babylonia in the Chaldean and Achaemenian Periods in the Light of the Babylonian Sources* (Tel-Aviv, 1976), 9.

33 See n. 40 below.

34 Zadok, *The Jews*, 9.

35 For a discussion of such compound renderings, see Steiner, *Fricative-Laterals*, 124-26.

36 Hilprecht and Clay, *Business Documents*, 69; cf. p. 27.

37 Hilprecht and Clay, *Business Documents*, 69.

in the archive: *A-qu-bu*, *Ḫa-nun*, *Za-bu-du*, and *Na-tu-nu*.[38] One cannot deny that *Sa-mu-ú-a* bears a striking resemblance to the renderings of שַׁמּוּעַ in the Vulgate (*Sammua*) and the Septuagint (Σαμμουε).[39] Nevertheless, Hilprecht's question mark is justified; a form like *Ša-mu-ú-aḫ* would have been much more convincing.[40]

Finally we should mention D. B. Redford's claim that the first *a* of *Ri-a-ma-še-ša* = *Rᶜ-ms-sw* (Heb. רעמסס) in the treaty between Ramses II and Hattusili III of Hatti (12th century B.C.E.) represents a furtive *pataḥ* in the divine name *Rēᶜ*.[41] However, that *a* is explained differently by other Egyptologists.[42]

In the transcriptions cited above, we must distinguish between [ᶜ] and [ḥ]. It is quite possible that [ᶜ] itself, when pronounced as a voiced sonorant,[43] was perceived as a distorted, strangled [ɑ]. Such a perception may underly Jerome's habit of referring to [ᶜ] as a vowel, e.g.:

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38   M. Lidzbarski, *Ephemeris für semitische Epigraphik* (Giessen, 1902-1915), 2.21.

39   So in 2 Sam 5:14 codex A.

40   In other words, we expect *š* = שׁ and *ḥ/aḫ* = ע as in *Šá-ma-aḫ-ú-nu* = שמעון and other names in the archive, e.g., *Šab-ba-ta-a-a* = שבתי and *Ia-di-iḫ-ili* = ידיעאל (Hilprecht and Clay, *Business Documents*, 59, 70). Cf. also the Late Babylonian renderings of הושע as *Ú-še-eḫ* and *A-mu-še-eḫ* in Zadok, *The Jews*, 9. Here too we have *š* = שׁ and *ḥ* = ע, in contrast to *s* = שׁ and *ʾ* = ע in Neo-Assyrian *Ú-se-ʾ* and *A-ú-se-ʾ* (loc. cit.). No *a*-glide is recorded in these or in Neo-Assyrian renderings of North Arabian [ᶜ]: *A-bi-ia-te-ʾ*, *Ú-a-a-te-ʾ*, *Ia-u-te-ʾ* (but also *Ia-u-ta-ʾ*), *Ia-di-ʾ*; see I. Eph'al, *The Ancient Arabs* (Jerusalem, 1982), 114, 136-37.

41   D. B. Redford, "The Land of Ramesses," in *Causing his Name to Live: Studies in Egyptian Epigraphy and History in Memory of William J. Murnane*, /history.memphis.edu/murnane/Redford.pdf, p. 1.

42   J. Osing, *Die Nominalbildung des Ägyptischen* (Mainz, 1976), 20-21; A. Loprieno, *Ancient Egyptian: A Linguistic Introduction* (Cambridge, 1995), 39.

43   Arabic *ᶜayn* has two realizations, which apparently vary according to dialect and position. One is a glottal stop accompanied by pharyngeal constriction (see n. 16 above); the other is creaky voice accompanied by pharyngeal constriction. The latter is a sonorant; as such, it is more likely to have been perceived as a vowel. Neither pronunciation involves friction in the pharynx; hence the conventional description of Semitic [ᶜ] as a pharyngeal fricative should be abandoned.

> *Gaza*: strength; however, it should be known that, with the Hebrews, it does not have a consonant letter at the beginning but begins with the vowel *ain* and is pronounced *Aza*.[44]

Moreover, the letter ʿ*ayin* is used very often in Punic to represent the vowel /a/ and only rarely for other vowels.[45]

By contrast, [ḥ] is a voiceless fricative. As such, it was not likely to be perceived as a vowel, and indeed Jerome describes it not as a vowel but as a double aspirate.[46] Thus, the transcriptions with *a* and α/ε are not likely to be renderings of [ḥ] itself; with final [ḥ], they must represent the vocalic transition or glide that is audible preceding [ḥ] when the pharyngeal constriction begins before voicing ends. The Septuagint shows that that glide was audible already in the third century B.C.E.

It will be noted that all of the evidence presented above concerns [ʿ] and [ḥ]. Transcriptional evidence for furtive *pataḥ* with [h] is late and rare.[47] Moreover, there is no obvious phonetic explanation for the use of furtive *pataḥ* with [h], as there is with pharyngeals. I suggest, therefore, that furtive *pataḥ* spread to [h] by analogy: since [h] behaves like [ʿ] and [ḥ] in other rules (degemination, *ḥaṭef*-epenthesis, etc.), it came to be included in this rule, as well.

The Absence of Furtive Pataḥ in הֶ‐

Why is there no furtive *pataḥ* in the BA m.s. suffixed pronoun הֶ‐? Why do BA לֵהּ "to him/it" and בֵּהּ "in him/it" differ in this respect from BH כְּמִתְלַהְלֵהַּ (Prov 26:16) and הַגְבֵּהַּ (Isa 7:11)? This question has been raised by several authorities on Biblical Aramaic. Qimron's answer

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44 *S. Hieronymi Presbyteri Opera*, Pars I, 1; *Liber Interpretationis Hebraicorum Nominum* (Turnholti, 1959), 87. For other examples and discussion, see E. F. Sutcliffe, "St. Jerome's Pronunciation of Hebrew," *Biblica* 29 (1948), 119-20; and J. Barr, "St Jerome and the Sounds of Hebrew," *JSS* 12 (1967), 19-23 .

45 J. Friedrich, W. Röllig, M. G. Amadasi Guzzo, and W. R. Mayer, *Phönizisch-punische Grammatik* (3rd ed.; Rome, 1999), 60-62 §§107-108.

46 See Sutcliffe, "Jerome's pronunciation," 118-19; and Barr, "St Jerome," 16-19.

47 Yeivin (מסורת הלשון העברית, 330) cites Jerome's *eloe* "God."

is brief and to the point: "Perhaps the rule of *he* in Aramaic is not the same as that of *ᶜayin* and *ḥet*?"[48] This answer may well be correct, but it raises another question: Why should *he* be different?

A possible answer to the latter question is provided by our suggestion that the Hebrew rule of furtive *pataḥ* evolved in two stages: (a) the original, phonetically-motivated core of the rule involving final [ᶜ] and [ḥ], followed by (b) an analogical extension involving final [h].[49] If so, the only difference in BH between [h] and the pharyngeals with regard to furtive *pataḥ* is diachronic. In BA, by contrast, there may have been a synchronic difference, since there is no evidence for an analogical extension of furtive *pataḥ* to [h] in that language.

The above answer assumes, with Bauer and Leander, that the vowel of ‎הֶ‎ is long. Bauer and Leander base their view on the contrast between the unchanged *ṣere* of ‎בֵּהּ־זִמְנָא‎ (Dan 3:7, etc.) and the *segol* < *ṣere* of ‎מִתְעֲבֵד־‎ (Ezra 4:19) < ‎מִתְעֲבֶד‎ (Ezra 7:26), ‎יִפֵּל־‎ (Ezra 7:20), and ‎אֲזַל־‎ (Ezra 5:15).[50] According to them, this contrast reflects a difference in length; short *ṣere* alternates with *segol* in closed unstressed syllables; long *ṣere* does not. However, they fail to mention counterexamples like BA ‎הֵן־‎ (Dan 2:9, Ezra 7:26), ‎בְּעֵל־‎ (Ezra 4:8, etc.), and ‎עֲבֵד־‎ (Dan 3:26), where short *ṣere* remains unchanged in closed unstressed syllables.

K. Beyer, on the other hand, transliterates ‎הֶ‎ with a short (macron-less) *e̯*.[51] Now, as is well known, short vowels differ from long vowels in their behavior before final pharyngeals. With short vowels (e.g., in non-pausal verbs and in nouns in the construct state), we normally get

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48 Qimron, ‎ארמית מקראית‎, 14 §2.1.2.2; cf. 32 §2.7.2.

49 For other phonological rules that seem to have evolved in stages, see R. C. Steiner, "On the Origin of the *ḥéðɛr* ~ *ḥăðár* Alternation in Hebrew," *Afroasiatic Linguistics* 3 (1976), 92-99; and id., "Variation, Simplifying Assumptions and the History of Spirantization in Aramaic and Hebrew," in *Shaᶜarei Lashon: Studies in Hebrew, Aramaic and Jewish Languages Presented to Moshe Bar-Asher* (ed. A. Maman, *et al.*; Jerusalem, 2007), *54-*58, *65.

50 H. Bauer and P. Leander, *Grammatik des Biblisch-aramäischen* (Tübingen, 1927), 78 §20q´; cf. p. 31 §6d´.

51 K. Beyer, *Die aramäischen Texte vom Toten Meer* (Göttingen, 1984-1994), 1.424.

total *replacement* by [a] instead of mere *insertion* of [a] (i.e., furtive *pataḥ*). For example, instead of יְשַׁלֵּחַ (long ṣere in pause; insertion of furtive *pataḥ*), we get יְשַׁלַּח (underlying short ṣere in context; replacement by *pataḥ*), and instead of מִזְבֵּחַ (long ṣere in the absolute state; insertion of furtive *pataḥ*), we get מִזְבַּח (underlying short ṣere in the construct state; replacement by *pataḥ*). This is as true for short ṣere before final pharyngeals in BA as it is in BH.[52] The conventional assumption is that it is true for short ṣere before final [h] in the two languages as well.

It is surprisingly difficult to find evidence for that assumption. With the possible exception of הֶ-, there is not a single example in the Bible of underlying short stressed ṣere before final [h], whether replaced by *pataḥ* or not.[53] We must make do with near-parallels like וַתֵּכַהּ, גֹּבַהּ, נֹגַהּ, וַתֵּלַהּ (where we have underlying unstressed *segol*) and with postbiblical forms like הַגֹּבַהּ in the Mishnah (Yoma 4:1 and Sukkah 4:9 in Codex Kaufmann) and מֹתמֹהּ in Targum Jonathan (Jer 12:5 in Sperber's edition). This evidence is far from satisfying, but it is all we have.

Let us assume, for the sake of argument, that the conventional assumption is correct—that the effect of final [h] on a preceding short stressed ṣere in BA was the same as that of final [ḥ] and [ʿ]. (Here again, we are speaking of an analogical extension of the original phonetically-motivated core of the rule.) It follows that, if הֶ- had a short vowel, it should have become הַ-. However, the form הַ- was already in use in BA, as the feminine counterpart of הֶ-. Thus, application of the rule in this case would have neutralized the opposition between the m.s. and f.s. suffixed pronouns. This suggests an alternative

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52 Replacement is more common in BA than in BH, in part because BA has many more short vowels. Hebrew has secondarily lengthened many short vowels in final syllables, especially in nouns and participles in the absolute state. In active participles, then, the output of the rule is replacement in BA (e.g., יָדַע, פָּלַח, מְשַׁבַּח) but insertion in BH (e.g., מְשַׁלֵּחַ, יֹדֵעַ, שֹׁלֵחַ).

53 A search using תכנית הכתר reveals that the only occurrences of stressed final הַ- in BH are תִּתְמַהּ, נֹגַהּ, כָּמַהּ, גֹּבַהּ, and גֹּבַהּ. None derives from underlying /eh/.

explanation for our anomalous form. The rule may have been blocked in this form to keep it distinct from its feminine counterpart.[54]

Conclusions

Furtive *pataḥ* originated as an *a*-glide—a non-syllabic transition to final [ʕ] and [ḥ], which have an *a*-timbre thanks to their pharyngeal articulation. After the *a*-glide became sufficiently prominent to form its own syllable, another glide arose before it, yielding the Tiberian pronunciation. For רוּחַ, the development was: [rūḥ] > [rūᵃḥ] > [rūɑḥ] > Tiberian [rūʷɑḥ]. For רֵיחַ, it was [rēḥ] > [rēᵃḥ] > [rēɑḥ] > Tiberian [rēʸɑḥ].

It is generally believed that final [h] has the same *a*-coloring effect in BH and BA as final [ʕ] and [ḥ]. To the extent that this is true, we must be dealing with an analogical extension, since [h] does not have an *a*-timbre. Application of the rule to הֵ- should have yielded הַ- (if the ṣere was long) or הַ- (if it was short). In the former case, we might say that the analogical extension simply did not take place in BA. In the latter case, we might say that the rule was blocked in הֵ- to preserve the contrast with הַ-.

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