ON THE DATING OF HEBREW
SOUND CHANGES (*\text{H} > \text{H} AND \text{*G} > \text{c})
AND GREEK TRANSLATIONS
(2 ESDRAS AND JUDITH)

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Scholars have long recognized the importance of the Greek transcriptions of Hebrew made during the period extending from the Septuagint to the Hexapla. Nevertheless, these transcriptions have yet to be fully exploited. In this article, I shall argue that they allow us to date both Hebrew sound changes (*\text{H} > \text{H} and, to a lesser extent, \text{*G} > \text{c}) and Greek translations of Hebrew books (2 Esdras and, to a lesser extent, Judith). I do not deny that linguistic dating of ancient literary material can be a perilous endeavor, particularly when it involves phonological change. Indeed, the example of such dating that springs to my mind is more of a cautionary tale than a model to be followed.

For Joshua Blau, on his eighty-fifth birthday.
I am greatly indebted to W. Clarysse, L. H. Feldman, J. H. Johnson, and S. Z. Leiman for their consistently gracious replies to my queries. As for Joshua Blau, my debt to him is not easily described in a brief footnote. He has been an inspiration to me on both the scholarly and the personal levels. In this article, my indebtedness to his On Polyphony in Biblical Hebrew is obvious throughout. I take this opportunity to reveal the unofficial subtitle of that monograph, which is not widely known. When I told him many years ago that my monograph on the pronunciation of \text{c} (The Case for Fricative-Laterals in Proto-Semitic) was to bear the subtitle “a study of original sin,” he replied that, by the same token, his monograph on the pronunciation of \text{h} could be subtitled “a study of the het qadmon.”


2 I refer to E. A. Knauf’s discussion of \text{ywr}. In “Jetur,” ABD 3:822, he notes that “in Safaitic, i.e., Arabic, the name of the tribe is spelled \text{ywr}.” From this he concludes: “Orthographically, the Hebrew spelling \text{ythwr} (instead of \text{*ythwr}) proves that this name entered the Hebrew tradition via (Official) Aramaic. The texts which refer to Jetur cannot, therefore, antedate the 7th century B.C.” Knauf does not explain why he believes \text{ythwr} would have been spelled \text{ywr} in Hebrew were it not for Official Aramaic mediation. Is it because Safaitic \text{z} corresponds to Hebrew \text{s} in cognates? That is irrelevant in transcriptions, which are normally based on perceptions of phonetic similarity.
I. *Ḥet and *Ḥayin before the First Millennium B.C.E.

It is generally agreed that Proto-Semitic had a voiceless uvular fricative (*ḥ) contrasting with a voiceless pharyngeal fricative (*ḥ). One minimal pair that may be plausibly reconstructed for Proto-West-Semitic (PWS) is *ḥālum, “sand” ≠ *ḥəlum, “maternal uncle.” In the second millennium B.C.E., loanwords in Egyptian show that the contrast was widely maintained in Northwest Semitic. However, there was a dialect written with a reduced version of the Ugaritic alphabet—probably Phoenician—in which this distinction and others had already collapsed or were in the process of collapsing. It was presumably

3 The reader who finds the quantity of data presented here wearisome can perhaps find some tiny comfort in the knowledge that the present article is actually quite a bit shorter than it could have been. In a desperate attempt to ease the reader’s burden, I have spun off parts of an earlier version into two additional articles!


5 J. Tropper, *Ugaritische Grammatik* (Münster: Ugarit-Verlag, 2000), 73–79, 124. It is generally assumed that *ḥ* was merged with *ḥ* in Phoenician; see, e.g., Z. S. Harris, *A Grammar of the Phoenician Language* (New Haven: American Oriental Society, 1936), 16–17; and J. Friedrich, W. Röllig, M. G. A. Guzzo, and W. R. Mayer, *Phönizische-punische Grammatik* (3rd ed.; Rome: Pontificio Istituto Biblico, 1999), 11 §9. In support of this assumption, we may note that Phoenician uses .GetText to render Demotic  and  (cf. n. 153 below), while Egyptian Aramaic, which preserved *ḥ* (see below), uses ṣ for that purpose. (For the data, but a different interpretation, see Y. Muchiki, “Spirantization in Fifth-Century B.C. North-west Semitic,” *JNES* 53 [1994]: 125–30; I am indebted
the speakers of this dialect who were responsible for reducing the old North-west Semitic alphabet to twenty-two letters. The existence of a voiced uvular fricative (*g) in Proto-Semitic, contrasting with the voiced pharyngeal fricative (*c), is widely assumed (with a few prominent exceptions) but by no means easy to demonstrate. The East Semitic evidence for such a phoneme is tenous at best, and even within West Semitic, g in one language often corresponds to c in another. Nevertheless, there are a few lexical items that exhibit g quite consistently in West Semitic, e.g., Arab. šagîr, Epigraphic South Arabian (ESA) šgr, Ug. šgr, Eg. Aram. *ţâyr < PWS *š-ţ-r, “be small,” and Arab. ġulām, ESA ġlm, Ug. ġlm, Eg. Aram. ġlm < PWS *ḡalmum, “lad.” From the second of these we can reconstruct something close to a minimal pair: PWS *ḡalmum, “lad” ≠ *ālamum, “eternity.”

II. The Preservation of *Ḥet and *Gayin in Hebrew and Aramaic

Greek Transcriptions of Hebrew and Demotic from Ptolemaic Egypt

Did *h and *g survive in Hebrew? Hebrew does not have separate signs for those phonemes in its twenty-two-letter alphabet, but, ever since the nineteenth century, many scholars have argued that the letters ṭ and ẓ were polyphonic, each representing a uvular fricative as well as a pharyngeal one. The
argument has been based on transcriptions of etymologically transparent names in the Septuagint (LXX), correlated with cognates in three other Semitic languages—Arabic at first, later ESA and Ugaritic. The claim is that the LXX uses the Greek velar stops (normally χ and γ, rarely κ) to transcribe the Semitic uvular fricatives (*h and *g) but zero, α, or ε for the Semitic pharyngeal fricatives (h and ϵ).12

The part of the theory dealing with *g is more difficult to prove than the part dealing with *h.13 It is not surprising, then, that opponents of the theory (like R. Růžička) directed their fire at *g, while defenders (like J. W. Wevers) focused on *h.14 The difficulty with *g (relative to *h) is not due solely to the comparative Semitic problem mentioned above. It is also due, according to the theory of J. Blau, to chronology: *g was lost earlier than *h in Hebrew.15 As we shall see below, the evidence of Josephus's transcriptions supports this aspect of Blau's theory.

In my view, Blau has succeeded in making a convincing case even for *g, and the entire theory must now be regarded as proven. Nevertheless, it may not be superfluous to add some corroborating evidence that has hitherto been

11 These and the Modern South Arabian languages have preserved both g ≠ h and h ≠ h. Akkadian has preserved h seemingly unmerged, but Akkadian h corresponds to West Semitic *h in a considerable number of cases; see now J. Huehnergard, "Akkadian h and West Semitic *h," in Studia Semitica (ed. L. Kogan; Orientalia: Papers of the Oriental Institute 3 [Alexander Militarev volume]; Moscow: Russian State University for the Humanities, 2003), 102–19. Hence, Akkadian evidence for West Semitic *h should be used cautiously, in conjunction with other evidence.

12 Examples with α and ε: Αερισσόν = α'ερίς, Ἰσαάκ = Ἰσαὰκ, Βαλαμ = βαλαὰμ, Γαλαάδ = γαλαὰδ, Φαραώ = φαραὼν, Γαβριὴλ = γαβριὴλ, Γάβρια = (γαβρία), Ελέαζαρ = ελεάζαρ, Φίλεις = φίλεις, Γεβεών = γεβεὼν, Βρησαβέες = βρησαβεὺς, Ἀλαχ = ἀλαχ. In a future article, I hope to present examples of pharyngeals perceived as [a] from other periods and languages. An example from a source close to the LXX in time and place is ῥαφα = γαφα (Eg. Rph, Akk. Rapilu) in the Histories of Polybius 5.80.3 and 5.86.2–8. Note that the final α cannot be a rendering of the Aramaic definite article, for the latter is not used with this toponym. In Tg. Onkelos (Deut 2:23), we find הָפָר, and in Pseudo-Jonathan (Deut 2:23), יִפְרַהַח, מַפְרַה. (The latter form exhibits the Galilean Aramaic shift h > ϵ; see n. 69 below). Whether the final α can be the rendering of a furtive patah instead of ה depends on whether furtive patah existed in that time and place; in any event, since consonants are frequently distinguished acoustically through their effect on an adjacent vowel, the two interpretations of the final α are not as different as one might imagine.

13 See Blau, Polyphony, 38.


15 Blau, Polyphony, 70.
overlooked. A pagan inscription on a limestone stele from Hermopolis Magna (78 B.C.E.) seems to make the same distinction as the LXX. It contains the
name Χέλκιας = Ῥ ὡ, with χ rendering Ῥ (cf. Arab. halaqa, “he measured”),
and two occurrences of the name Ἀγγιών = (ἄ)γγι, with zero rendering Ῥ (cf.
Arab. hajj, “pilgrimage”).16 A similar contrast can be seen in the names of the
two Jewish generals commissioned by Cleopatra III in Egypt at the end of the
second century B.C.E.: Χέλκιας vs. Ανανίας = Ῥ ῦ (with zero rendering Ῥ; cf.
Ug. ῥ-หวย, “be kind”).17 The form Χέλκιας stands in contrast to the form
Ελκιας, found in Palestinian sources of the Roman period.18

More significant statistically are Greek transcriptions of Ῥ, ῦ, and ἦ in
Demotic Egyptian names of the Ptolemaic period.19 In these transcriptions,
Demotic ῦ is normally rendered with χ, while ῦ and ἦ are normally rendered
with zero.20 Most telling of all are the cases in which the renderings of ῦ and ῦ

16 W. Horbury and D. Noy. *Jewish Inscriptions of Graeco-Roman Egypt* (Cambridge: Cambridge University Press, 1992), 249–50 no. 156. Ἀγγιών is compared there with ἵ, but it seems closer to ῦ and especially ῦ. Greek ῦ is used occasionally to render Hebrew *qamets*. The true equivalent of ἵ is Ἀγγιώς, attested in a different inscription (ibid., 249).

17 These names are cited by Josephus (Ant. 13.10.4 §285) from Strabo of Cappadocia, who must have gotten them from an earlier source.

18 See at n. 72 below.

19 To avoid circularity, I have based this investigation almost entirely on names from bilingual inscriptions, where the Greek and the Demotic Egyptian appear together. They were collected for me by K. Rempe from E. Lüddecken et al., *Demotisches Namenbuch* (Wiesbaden: Reichert, 1980–2000), henceforth cited as DN.

20 E.g., Ἑφονυχος = ἵ ὅ-μή, “Er lebt” (DN, 60); Ἀπαθο (gen.) = ἵ πή, “Groß an Kraft” (DN, 95); Ἕσυχος (gen.) = ᾤ ἱ-λνσ, “Er lebt für Chons” (DN, 100); Πενεγκις = ᾤ ῦ-νή, “Der Vortreffliche” (DN, 158); Πεμα = ᾤ ῦ-νή, “Das Krokokil” (DN, 191); Φασευς (gen.) = πι-ήτρ, “Der Zwilling” (DN, 206); Παρονος = πυ-ήτσ, “Der Diener des Chons” (DN, 210); Πεταρνης = πυ-ήτρ-π-ή, “Der, den Horus-Re gegeben hat” (DN, 326); Πεταρνης (τις) = πυ-ήτσ-ήτρ-π-ή, “Der, den Harpokrates gegeben hat” (DN, 328); Πεταρνης (θεὺς) = πυ-ήτσ-ήτρ-μ-ή, “Der, den Horus, der Vereiniger der beiden Länder, gegeben hat” (DN, 334); Πετηντο = πυ-ήτσ-ήτρ-νσ, “Der, den Chons gegeben hat” (DN, 336); Πανεχθις = πα-ή-ήτ, “Der der ἱτ-Đämonen” (DN, 382); Πανεχθις = πα-ή-ήτ, “Der des Anfangs” (DN, 397); Πανεχθις = πα-ή-ήτ, “Der des Hohen?” (DN, 404); Πανεχθις = πα-ή-ήτσ, “Der zu Chons Gehörige” (DN, 406); Μαρσονόσιος = μ-ή-ήτ-σ-ήτ, “Marres, Sohn des Sobek” (DN, 582); Μαρσονόσιος = μ-ή-ήτ-σ-ήτ, “Wahrsag der Thot” (DN, 583); Νεξθοντος = (μ-ή-ήτ-σ-ήτ-σ-ήτ). “Er ist stark gegen sie” (DN, 622); Νεξθοντος (gen.) = nb-σή, “Herr des Lebens” (DN, 636); Νεξθοντος (gen.) = nh-μήτ, “Stark ist Monoth” (DN, 650); Ονεσος (gen.) = ἀυτ. “Jüngling” (DN, 778); Υλος = ἀυτ., “Horus, (gen.) = ἀυτ. “Horus, grimmig blickender Löwe” (DN, 815); Ἀρμυς = ἀυτ. “Seliger” (DN, 846); Ἀσατος = ἀυτ. “Möge er erscheinen” (DN, 873); Ὀμηθις = Ῥ-ή-ήτ-σ, “Ihr (Kg.) Herz ist kühl” (DN, 976); Τομενος (gen. of Τομενος = τα-ή-ήτν, “Die des (göttlichen) Jünglings” (DN, 1187); Τομενος (gen.) = τα-ή-ήτ-σ, “Die der ἱτ-Đämonen” (DN, 1192); Θεωντος = τα-ή-ήτ-σ, “Thot ist gekommen” (DN, 1298), Θεωντος = τα-ή-ήτ-σ, “Thot ist es, der ihm gegeben hat” (DN, 1300); and Θεομοπος (gen. of Θεομπος = τα-ή-ήτ-σ, “Thot ist wahrhaft” (DN, 1302).
contrast in a single name: Acoapia (gen.) = nh\-hp, “Es lebt der Apis,” Armacia = hr-m-hj, “Horus im Horizont,” and Θεωρκης = thtw\-j\-r\-h, “Thot ist (all)wissend.” Alongside almost 140 occurrences of names that follow this pattern, there are three exceptions: once we find h rendered with k, and twice we find apparent examples of h rendered with χ. Such renderings are found in the LXX as well. Scholars who do not accept the LXX as evidence for *h have naturally adduced examples (or alleged examples) of χ for h in the LXX as counterevidence, and it is therefore significant that Greek transcriptions of Demotic also have such exceptions.

It appears, then, that Demotic h and h are distinguished quite consistently in Egyptian Greek. Moreover, the means of distinguishing are very similar to the means that have been posited for Hebrew *h and h in the LXX. In short, these transcriptions reinforce the Greek side of Blau’s proof. We turn now to transcriptions that reinforce the Semitic side.

Demotic Transcriptions of Aramaic from Ptolemaic Egypt

Blau’s conclusion concerning the Egyptian pronunciation of Hebrew in the Ptolemaic period fits perfectly with the contemporary evidence for Egyptian Aramaic. Until twenty years ago, the conventional wisdom was that *h and *g did not survive in Aramaic. In 1969, R. Degen referred to this as the communis opinio. In the third unrevised edition of his Altaramäische Grammatik, Blau (Polyphony, 49–51) lists a half-dozen apparent examples of h rendered with χ. For evaluation of an alleged countereexample cited in a standard work, see J. Blau, “Review of S. Moscati et al., An Introduction to the Comparative Grammar of the Semitic Languages,” Leshonenu 30 (1966): 141; and Steiner, Fricative-Laterals, 120 n. 28.

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Contrast the much later Greek transcriptions of Arabic h and h cited by Blau (Polyphony, 40–41).

published in 1986, S. Segert still accepted this assumption. 31 The few dissenting voices were largely ignored.

Today we know, thanks to papyrus Amherst 63, that this assumption is incorrect—at least for Egyptian Aramaic. 32 It will be recalled that Amherst 63 is a long Aramaic text recorded in the Demotic Egyptian script instead of the normal Aramaic script. 33 The Demotic script has an abundance of signs for back fricatives, and so it was only natural for Semitists working on Amherst 63 to address the issue of *$h$ and *$g$. R. A. Bowman did so in his article on the text, published in 1944, writing: “[The parallel passages] also have aided us in determining that there is apparently no finer distinction between laryngeals in the papyrus than there is otherwise in Aramaic, despite the fact that there are several variant forms for some of the letters.” 34 This statement is not easy to understand, for *$h$ and *$g$ are not laryngeals, and there is no way for the reader to guess that the “variant forms for some of the letters” are actually distinct Egyptian phonemes rather than allographs. 35 Accordingly, one may forgive T. H. Gaster for asking, in an unpublished letter to Bowman about the article: “Similarly, is there a distinction between $j$ and $1j$ phonetically? In other words, is original $`d$ distinguished from $d$?” 36 Bowman’s point had been formulated more clearly in the presidential paper that he read before the Midwest branch of the AOS on April 6, 1943: “There is apparently no fine differentiation [sic] between the laryngeals $ayin$ and $ghayin$, or $ha$ and $ha$.” 37

This initial impression has not stood the test of time. Indeed, one of the important linguistic contributions of the Aramaic text in Demotic script is its furnishing of conclusive evidence that the uvular fricatives—*$g$ and *$h$—survived in Egyptian Aramaic for a long time. 38 I pointed this out to various col-

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31 S. Segert, *Altaramäische Grammatik* (Leipzig: Verlag Enzyklopädie, 1986), 88: “Das für die älteste Phase des AA ermittelte System weist bereits eine Einschränkung des Konsonantenbe standes, besonders der Postvelaren und der Alveolaren auf. . . . Die alten Postvelare $h$ und $g$ sind zu den Pharyngalen $h$ und $g$ geworden.” He has since changed his mind; see n. 46 below.

32 However, it is probably not incorrect for the Aramaic spoken in Assyria; see R. C. Steiner, “$H > H$: On the Diffusion of an Assyro-Aramaic Sound Change to Babylonia, Iran, and Cilicia” (forthcoming).


35 Bowman may have been misled by Nims’s use of numeral superscripts in transliterating the Demotic signs (into Hebrew). The signs that Nims transliterated $'$ and $'$ proved to be mere allographs of $'$ and $'$, respectively, but the sign that Nims transliterated $'$ represents a sound phonemically distinct from $'$ in both Demotic and Aramaic.

36 Letter from T. H. Gaster to R. A. Bowman, Nov. 19, 1944.

37 I am indebted to J. A. Larson, Museum Archivist of the Oriental Institute, for providing me with photocopies of the handwritten lecture and the letter cited in the previous footnote.

38 On the Egyptian side, it establishes a *terminus post quem* for the loss of $c$, $h$, and $h$ that is
leagues at the University of Chicago a few weeks after I began work on the text there early in 1981, and I have noted it briefly in print on a number of occasions, as has J. W. Wessellius. Unlike the Greek alphabet and the cuneiform syllabary, upon which previous attempts to demonstrate the polyphony of \( \pi \) and \( \nu \) in the Hellenistic period were based, the Egyptian script is reasonably well suited to the task of differentiating uvulars from pharyngeals. This is at least as true of the Demotic script in Amherst 63 as it is of the New Kingdom scripts used for Canaanite in the second millennium B.C.E. They all have contrasting signs for \( \xi \), \( h \), and \( h \), not to mention \( h \). In fact, in addition to \( h \), Demotic has a phonetically similar fricative transiterated \( \tilde{h} \). The absence of a sign for \( \tilde{g} \) is a drawback, but not a serious one. In Amherst 63, \( h \) and \( \tilde{h} \) are used to render \( *\hat{g} \) (as well as \( *h \)); in New Kingdom texts, Egyptian \( q \) and \( g \) are the substitutes. Thus, there is never a need to appeal to transcriptions with zero, as there is in dealing with Greek and cuneiform evidence.

In Amherst 63, Aramaic \( *\hat{g} \) and \( *h \) are consistently distinguished from \( \hat{c} \) and \( *h \), respectively, in dozens of examples. True minimal pairs are difficult to find, but one can come close: \( \overline{\tau} = \ell \), “on” \( \neq \hat{h}, r = \hat{g}, “enter!” \) (cf. Arab. “‘alā, “on,” \( g\alpha \lambda \alpha, “he caused to enter, he entered”\); \( \ell \overline{\tau} \overline{\nu} \mu = \ell \overline{\nu} \mu \), “eternity” \( \neq h r m. m \) = \( \hat{g} \mu \nu \), “lad” (cf. Ug. \( \ell \mu \nu \), “eternity,” \( \hat{g} \mu \nu \), “lad”\); \( h \overline{r} \mu m.l.m = h (\mu h), “venom” \( \neq h, m r.l.m = h m r, “wine” \) (cf. Ug. \( h m t, “venom,” h m r, “wine”\)). Examples of uvulars and pharyngeals occurring in close proximity are: \( e k n \nu r h m \tau h m.m \) [...] \( e \tilde{s} \tau r.l.m h m r.m [\ldots] = \hat{g} l h h m h [\ldots] y t(y) h m r(h) [\ldots], “eat its bread \[\ldots] drink its wine \[\ldots]” \) (XVII/15–16); \( h, r r k.m \) \( h r m.m \) \( e n h.n.n.m e r h.k.m = \hat{g} l - l k \hat{g} l m(\nu) \hat{g} n h n(h) n r h k, “enter, lad; we will give you lodging” \) (XVI/4–5); \( \overline{n} \overline{r} h m t y \hat{h}, r.k = r h m t y g l-(l)k, “my beloved, enter” \) (XVI/12). Many additional examples could be far later than the ones supplied or hinted at by J. Vergote (“Egyptian,” in Current Trends in Linguistics [ed. T. A. Sebeok; The Hague: Mouton, 1963–], 6:535–36), J. P. Allen (“Languages [Egyptian],” ABD 4:191), and A. Loprieno (“Ancient Egyptian and Other Afroasiatic Languages,” in Civilizations of the Ancient Near East [ed. J. M. Sasson; New York: Scribner, 1995], 2142).

30 I still have in my possession a small piece of note paper on which I jotted examples in 1981 and which I used to explain the discovery to Egyptologists and others.

31 See already C. F. Nims and R. C. Steiner, “A Paganized Version of Ps 20:2–6 from the Aramaic Text in Demotic Script,” JAOS 103 (1983): 263: “the Proto-Semitic contrast of \( \hat{h} \) with \( h \) is perfectly preserved”; and R. C. Steiner and C. F. Nims, “You Can’t Offer Your Sacrifice and Eat It Too: A Polemical Poem from the Aramaic Text in Demotic Script,” JNES 43 (1984): 93: “like the scribe, we distinguish velar \( \tilde{g} \) from pharyngeal \( \hat{c} \).”

41 E.g., \( g d t \overline{q} \overline{d} t = g x t, “Gaza,” m \overline{g} r t = m \overline{g} r t, “cave,” q r n t = q r l t, “foreskin”; see Hoch, Semitic Words, 412–13. Egyptian \( \tilde{g} \) is used to render Anatolian \( \tilde{g} \) as well; see F. Starke, Untersuchung zur Stammbildung des keilschrift-luwischen Nomens (Wiesbaden: Harrassowitz, 1990) 142 n. 442a, 144 n. 449, 145 at n. 457. Thus, in New Kingdom texts, transcriptions of \( \tilde{g} \) ignore manner of articulation, whereas in Amherst 63, they ignore the state of the glottis.
adduced. Moreover, the same distinction is maintained in Demotic transcriptions of Northwest Semitic names. Thus, the Hebrew name יָשִׁי (cf. Ug. š-h-q, etc.) appears as ȝyšh in an ostracen dated 153/152 B.C.E., while the Aramaic name רַשְׁי (cf. Ug. aḥ, etc.) appears as ȝykl and ȝygl in Demotic fragments of the Ahīqar story from the first century C.E.; cf. also Χα(α)χρος in the Greek version of Tobit. All of this proves beyond a reasonable doubt that Egyptian Aramaic—like Ugaritic, Arabic, and South Arabian—preserved the uvular fricatives unmerged. Recent works on Aramaic have accepted this as a fact.

Minimal Pairs, Homonyms, and Polysemes

It follows that Aramaic ܐܠ, “on,” vs. ܠ, “he entered,” and ܐܠ, “he sent,” vs. ܠ, “he doffed,” were still minimal pairs—not homonyms—in Achaemenid Egypt: ܐܠ, “on” ≠ ܐลาด, “he entered,” and ܣܠ, “he sent” ≠ ܣܠ, “he doffed.” Similarly, it is now clear that, throughout the biblical period, Hebrew יַר, “Horites (LXX Χορρίοι)” (Deut 2:12), and ʾיַר, “holes” (1 Sam 14:11), were pronounced with initial h—in contrast to ʾיַר, “nobles” (1 Kgs 21:8), which was pronounced with initial h. One should accordingly view


43 DN, 3; W. Clarysse, “A Jewish Family in Ptolemaic Thebes,” Journal of Juristic Papyrology 32 (2002): 7–9. The name is identified there with ܩܝܣܐ, but it is closer to ܩܝܣ, a variant that occurs four times in the Bible (twice in Amos). The postbiblical Jewish pronunciation of the name, which passed into Palmyrene Aramaic, Syriac, and Arabic, was ܩܝܣ; see Steiner, Fricative-Laterals, 117; H. Ingholt, “Two Unpublished Tombs from the Southwest Necropolis of Palmyra, Syria,” in Near Eastern Numismatics, Iconography, Epigraphy and History: Studies in Honor of George C. Miles (ed. D. K. Kouymjian; Beirut: American University of Beirut, 1974), 50, 53 (ܩܝܣ @ܒܢܡܒ @ܒܩ @ܒܢ). Demotic š for Northwest Semitic *蝣 would seem to reflect, in this case, a Northern Israelite or Samaritan pronunciation; see Steiner, Fricative-Laterals, 43.


45 J. A. Fitzmyer, Tobit (Berlin: de Gruyter, 2000), 37 n. 117, 122, etc.


47 For other ramifications, see Steiner, “Addenda,” 1499–1501.
with suspicion the claim that the name of the Horites “could be explained by Heb. ḫor, Arab. ḫurr, ‘free, noble.’”

In the postbiblical period, ḫ merged with ḫ or, and the minimal pair ʿḥorr < ḫurrīm, “holes” ≠ ʿḥorr < ḫurrīm, “nobles, freemen,” turned into a pair of homonyms. But what of the other minimal pair, ʿḥorr < ḫurrīm, “Horites” ≠ ʿḥorr < ḫurrīm, “nobles, freemen”? Did this too turn into a pair of homonyms? Not according to Jerome; in his commentary on Obad 1, he interprets the outcome as a single polysemous lexeme:49 “and [Edom] possessed that region, which is now called Gebalena,50 and in the boundaries [of which] is Ἐλευθερόπολις, ‘Freetown,’ where formerly the Horraei lived (which is translated ‘free men’), from which also the very city later got its name.”51 The idea that the name of the Horites is derived from the word for “free men” must have been irresistible to anyone who knew that the Horites were the aboriginal inhabitants of Seir = Edom (Gen 14:6 and Deut 2:12, 22) and that an important city of Idumea = Edom was called “Freetown.”52

49 For this type of reinterpretation, see L. Bloomfield, Language (New York: H. Holt, 1933), 436; and S. Ullmann, Semantics: An Introduction to the Science of Meaning (New York: Barnes & Noble, 1962), 104–5, 164–65. If we define “polysemy” and “homonymy” in synchronic terms (as I believe we should), then we may state simply that, when minimal pairs are neutralized, the outcome is sometimes polysemy rather than homonymy.
51 S. Hieronymi Presbyteri Opera, Pars I, 6, Commentarii in Prophetas Minores (Turnholt: Brepols, 1969), 354. A similar idea is found in Genesis Rabbah §41 (דַרְדִּיא בַּרְשֵׁית רַב) to Gen 14:6: And the Horites—Eleutheropolis ‘Freetown’. And why is it called Eleutheropolis ‘Freetown’? Because they chose it, and it gained its freedom for them in the generation of the separation.” However, this is midrash, not etymology. It is noteworthy that Jerome did not derive Horraei from the Hebrew word for “holes,” despite the fact that he knew that word and, like Philo, even used it in interpreting a well-known toponym: “Charran foramina . . .”; see S. Hieronymi Presbyteri Opera, Pars I, 1; Liber Interpretationis Hebraicorum Nominum (Turnholt: Brepols, 1959), 64; and L. L. Grabbe, Etymology in Early Jewish Interpretation: The Hebrew Names in Philo (Atlanta: Scholars Press, 1988), 218. (I am indebted to J. L. Kugel for telling me of Philo’s etymology.) The point is that, by Jerome’s time, there was no longer any reason to prefer this etymology. Jerome had no inkling that the LXX distinguished two realizations of π, using Greek χ for only one of them (see below).
52 In actual fact, the town of Bet Guvrin got this name in ca. 200 C.E., long after the disappearance of the Horites, when Septimus Severus conferred on it the privileges of a Roman city. Moreover, the home of the biblical Horites was east of the Jordan, while Eleutheropolis was west of it.
III. The Loss of *Het and *Gaiin in Hebrew and Aramaic

Dating the Loss in Egypt

When did the uvular fricatives (*h and *g) merge with the pharyngeal ones (h and g)? For Egyptian Aramaic, Amherst 63 provides a terminus post quem. The text was probably reduced to writing (through dictation to a scribe trained in the fourth century B.C.E.) at the beginning of the third century B.C.E.53 If so, the mergers of *h and *g in Egyptian Aramaic, if they occurred at all, must have occurred after that time. For Hebrew, we may rely on the LXX, which (leaving 2 Esdras and the apocryphal books aside for the moment) appears to have been completed by the end of the second century B.C.E.54 If so, the loss of *h in Hebrew must have occurred after that time.

The inscription from Hermopolis Magna cited above—a pagan inscription not likely to have been influenced by the Septuagint—gives a slightly later and seemingly more precise terminus post quem: 78 B.C.E. The Demotic fragments of the Ahiqar story cited above are even later; they come from the first century C.E. Unfortunately, we cannot deduce from the form ḥykl that *h was still unmerged in the first century C.E., unless we make the unlikely assumption that the Ahiqar story was not translated from Aramaic into Demotic until that time. Nor can we rule out the possibility that the form Ḫελκία in the inscription from Hermopolis Magna is also phonetically anachronistic, as it appears to be in other, later inscriptions from Egypt. Ḫελκία is attested in papyri dated 13 B.C.E. (Alexandria) and 59 C.E. (Babylon in the Heliopolite district) and in an ostracon dated 106 C.E. (Edfu).55 The last attestation is later than Ḫελκία in Josephus’s Antiquities, not to mention גביה at Masada.56 Are we to conclude from this that *h survived longer in Egypt than in Palestine? Judging from Philo, Egyptian Jews knew very little Hebrew in the first century C.E. It is therefore unlikely that the form Ḫελκία tells us anything about the pronunciation of Hebrew in Egypt in that century. What it tells us about the pronunciation of Hebrew in Egypt in the previous century must remain an open question.

According to Blau, the loss of *g was earlier than the loss of *h: “It was only

53 Contra Nims and Steiner, “Paganized Version,” 261: “our papyrus is from the late second century B.C.E.” We thought at the time that it had been buried together with dated documents from that period in a single jar, but that seems much less likely today. I am at a loss to explain the origin of the first century B.C.E. dating that some writers have mistakenly attributed to us.
56 See below.
at the time of the translation of the Pentateuch that ǧ was alive in Hebrew. Later, ǧ disappeared from the spoken language, yet was still, it seems, retained in literary solemn language, as in the public reading of the Bible in synagogues."57

**Dating the Loss in Palestine: Reading versus Speaking**

The distinction made by Blau between reading and speaking—a distinction of “style” or “register”58—is crucial for making sense of the new data presented below. Reading is, by nature, more formal and conservative than speaking, even when the text being read is not a sacred one. In his studies of phonological variation, W. Labov found “a marked shift from the most formal elicitation [of careful speech] to the least formal reading.”59 The pronunciation used for the public reading of the Bible was undoubtedly at the most formal end of the spectrum, for it was governed by tradition. Indeed, one may wonder whether to speak of a “reading style” (à la Labov) or a “reading tradition.”60 The latter term is certainly correct for later periods, when Hebrew was no longer a spoken language; for the sake of simplicity, we shall use it for earlier periods as well. We shall deal with the spoken language separately, in a later section.

Blau’s distinction is particularly useful in dealing with Josephus, who, it appears, had *h in reading but not in speaking (assuming, with many Hebraists, that Hebrew was still spoken in his time). He seems to allude to such a difference in explaining his decision to add Greek case endings to his transcriptions of biblical names in *Ant. 1.6.1 §129:

> With a view to euphony and my readers’ pleasure these names have been Hellenized. The form in which they here appear is not that used in our country, where their structure and termination remain always the same; thus Νοχος in Hebrew is Νοχ, and the name retains this form in all the cases.61

It is striking that, according to most manuscripts, Josephus does not contrast Νοχος with *Νοχ, or *Νοχος with Νοχ. There are two differences between Νοχος and Νοχ: (1) the former has a case ending, while the latter does not; (2) the former has a ҳ, while the latter does not. The relevance of (1) is clear,


58 See also Blau, *Polyphony*, 7. For the distinction in sociolinguistic theory, see *Style and Sociolinguistic Variation* (ed. P. Eckert and J. R. Rickford; Cambridge: Cambridge University Press, 2001) and the literature cited there.


60 For the biblical reading tradition(s), see R. C. Steiner, “Ketiv-Kere or Polyphony: The GetMethod Distinction according to the Masoretes, the Rabbis, Jerome, Qirqisání, and Hai Gaon,” in *Studies in Hebrew and Jewish Languages Presented to Shelomo Morag* (ed. M. Bar-Asher; Jerusalem: Bialik, 1996), *153 n. 5, *175 and the literature cited there.

but not the relevance of (2). É. Nodet solves this problem by simply emending \( \text{Nωε} \) to *\( \text{Νοχ} \), against all of the manuscripts (both Greek and Latin) and previous scholars.\(^{62} \) However, the emendation may not be necessary. The second difference can be explained as reflecting the gap between the spoken language and the conservative reading tradition.\(^{63} \) The meaning of Josephus’s statement would then be: “\( \text{Νοχ} \) in Hebrew speech is \( \text{Nωε} \).”\(^{64} \)

The disparity between Josephus’s reading tradition and his speech may perhaps also be seen in his transcription of three names borrowed from Akkadian. For biblical \( \Sigmaεν(ν)\alphaχευ\eta\mu\iota\betaος \) < \( \text{Sin-ahhe-eriba} \) and \( \Pi\eta\alpha\mu\iota\iota\nu\varsigma \) < \( \text{Aššur-ah-iddina} \), he has \( \text{Σεν(ν)}\alphaχευ\,η\iota\mu\iota\betaος \) (\( \text{Ant. 10.1.1–5 §§1–23} \)) and \( \text{Ασαραχοδδας} \) (\( \text{Ant. 10.1.5 §23} \)) respectively, with Greek \( \chi \) rendering \( \pi \) < Akk. \( h \). His transcription of extrabiblical \( \text{寅ινηριπ} \) < \( \text{Araḥsamnu} \),\(^{65} \) on the other hand, is \( \text{Μορ(φ)}\,\sigmaουανς} \) (\( \text{Ant. 1.3.3 §80} \)).\(^{66} \) In this month name from spoken Hebrew or Aramaic, \( \pi \) < Akk. \( h \) is rendered by zero.

The tension between Josephus’s reading tradition and his speech may also explain the variation in his transcription of \( \chi \) in the toponym \( \text{γ}(\iota)\text{ν(α)}\pi\ ν\text{τ} \). In his account of Solomon (\( \text{Ant. 8.6.1 §152} \)), he calls it \( \text{Βηθχωρα} \),\(^{67} \) but elsewhere in his works (nine occurrences in \( \text{Antiquities} \) and \( \text{War} \), eight of them postbiblical and hence from the spoken language), he writes \( \text{Βη/\,ε/\,αθωρα/ο} \) or the like, without \( \chi \).\(^{68} \) It appears that Josephus intended the form \( \text{Βητχωρα} \) to be the tra-

\(^{62} \) É. Nodet, \textit{Les Antiquités juives} (Paris: Cerf, 1990–), 1B.32 n. 8: “Les mss donnent \( \text{Νωε} \), forme provenant de la LXX, mais il faut rétablir \( \text{Νοχ} \) pour que l’explication ait un sens.” Alternatively, one could emend \( \text{Νοχ} \) to \( \text{Νοχ} \). The latter is the reading of two manuscripts everywhere Noah is mentioned and is viewed as original by E. Hatch and H. A. Redpath, \textit{A Concordance to the Septuagint} (Oxford: Clarendon, 1897–1906), 3:121.

\(^{63} \) Blau’s conclusion that \( \text{h} \) “disappeared from both spoken and literary Hebrew at the same time” (\textit{Polyphony}, 70) does not take into account the evidence of Josephus and the inscriptions.

\(^{64} \) According to this explanation, Josephus’s use of the form \( \text{Νωε} \) has no connection with the LXX’s use of that same form. The latter, unlike the former, is quite puzzling, since, as Blau notes, “its root seems to be \( \text{ънвк} \)” (\textit{Polyphony}, 49). The root is attested with the meaning “rest” in Ugaritic and Modern South Arabian; see G. del Olmo Lete and J. Sammartín, \textit{A Dictionary of the Ugaritic Language in the Alphabetic Tradition} (Leiden: Brill, 2003), 629; and T. M. Johnstone, \textit{Hursûsî Lexicon} (London: Oxford University Press, 1977), 99. Note also the noun \( \text{μναθμ} = \text{μναθ(т)} \), “rest,” in Amhers 63 (XVIII/2) and \( \text{Μανωκοθ} = \text{ραςάν} \), \( \text{Ιαυνχ} = \text{παν} \) in the LXX itself, and cf. \( \text{Πενχπς} = \text{πα-μή} \), “Der Vortreffliche,” in n. 20 above. If so, the correct form in the time of the LXX would have been \( \text{Νωχ} \). The same goes for \( \text{Μανωκ} \), the LXX’s transcription of \( \text{παν} \) vs. LXX \( \text{Σηκων} \) also belong here?\(^{65} \)


\(^{66} \) The Greek manuscripts have \( \text{Μαρσοουανς} \), but A. Schalit (\textit{Namenwörterbuch zu Flavius Josephus} [Leiden: Brill, 1968], 82) reconstructs \( \text{Μαρσοουανς} \) based on Latin \( \text{Maresuan} \). F. Blatt (\textit{The Latin Josephus I} [Aarhus: Universitetsforlaget, 1958–], 133) gives the form as \( \text{Marechaseuan} \). He lists many variant readings, only one of which is significant for our purposes: \( \text{Marechaseuan} \).

\(^{67} \) The \( \chi \) is attested in all witnesses.

\(^{68} \) See further below. There are no variant readings with \( \chi \) for any of the nine occurrences.
ditional counterpart of ḫθωρα. However, the LXX (including 1 Maccabees and Judith) has ḫαιωρα and the like, agreeing with Bi-t H-w-ru-n in Egyptian (Shishak List) and the divine name ḫrn, “Horon” (also bt ḫrn, “temple of Horon”), in Ugaritic. Clearly, the transcription with χ has no etymological basis, and yet it is attested in all witnesses to Ant. 8.6.1 §152. It appears to be a hypercorrection, reflecting the struggle to preserve *ḫ in the reading tradition after it was lost in speech.

The same solution may be considered for ḫαβαβ in Matt 1:5, usually identified with בּוֹר בּוֹר in Josh 2:1. The expected form, ḫαβ, (cf. Ug. ḫb, “wide,” etc.), is used elsewhere in the NT (Heb 11:31 and Jas 2:25), not to mention the LXX. The witnesses to Josephus (Ant. 5.1.2–7 §§8–30) are divided: four manuscripts read ḫαβ, while three manuscripts have ḫאב, agreeing with Raab in the Latin version.

If ḫחωρα and ḫαβ reflect hypercorrect pronunciations of biblical names, we must also consider the possibility that χ in non-hypercorrect Josephan forms is occasionally the product of deliberate archaizing. This is particularly important in evaluating Josephus's transcriptions of the names of people who lived in the first and second centuries B.C.E. for use in dating the loss of *ḫ. Take, for example, Josephus's transcriptions of ḫאק (cf. Ug. ḫk, “wide,” etc.), which he mentions several postbiblical figures bearing the latter name. The one he consistently calls ḫֶּלֶק (four times) is from the end of the second century B.C.E.; the ones he usually calls ḫֶלֶק (four times; ḫֶלֶק once) are from the first century C.E. Similarly, Josephus mentions a cousin of Herod named ḫחאָב.
(seven times) = אַב in connection with events that took place in ca. 28 B.C.E. and 4 B.C.E. It appears that, in rendering "h in the names of postbiblical figures, Josephus normally used zero for contemporaries but χ for people who lived before his time. How is this to be explained? Did Josephus copy the form Αχιαβος from a Greek source of the Herodian period? Or did he know the name אַב from a Hebrew or Aramaic source, written or oral, and transcribe it himself, using a deliberately archaic (and possibly anachronistic) rendering of χ? Until this question is answered, we cannot consider Αχιαβος as reliable evidence for the pronunciation of the Herodian period.

**Dating the Loss in Palestine: Biblical Reading Traditions**

In dating the loss of "h and "g in the biblical reading tradition(s), the obvious place to begin is the Masorah. The masoretic pointing systems (Tiberian, Palestinian, and Babylonian) and treatises provide a terminus ante quem for the loss, since they know nothing of a double realization for נ and ס—unlike ס and פס. The Masoretes did not add any distinguishing points, presumably because "h and "g were lost long before their time, and because each happened to merge with its polyphony partner, ה and כ respectively—unlike צ and פס, which merged with ס instead of its polyphony partner, ס. Had they merged, say, with כ and ג respectively, we would have had a “left-pointed נ” (וֹדֵד נָאָם) realized [k] and [k] alongside a “right-pointed נ” realized [l], and likewise a “left-pointed ג” realized [g] and [g] alongside a “right-pointed ג” realized [s]—just as we have a “left-pointed ס” (i.e., ס) realized [s] alongside a “right-pointed ס” realized [s].

It is also certain that the mergers occurred well before Jerome settled in Palestine (385–389 C.E.). Jerome interprets the use of γ to render ס in terms of כ, not ג:  

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73 For six of the seven occurrences, Niese gives no variant readings. In Ant. 15.10.5 §250, one witness out of seven has אַב.  
74 For the double realization of נ, see G. Khan, “The Pronunciation of the reš in the Tiberian Tradition of Biblical Hebrew,” HUCA 66 (1995): 67–80 and the literature cited there. It is known only from literary sources (Sefer Yesirah and its commentaries as well as masoretico-grammatical treatises). With נ (unlike פס), no distinguishing points were needed to guide the reader, because the distribution of the two realizations was completely predictable.
75 I am coining the term “polyphony partners” to refer to phonemes that are represented by the same grapheme, e.g., English /θ/ (t) and /ð/ (d), both represented by the digraph th, as in ether and either. If there is an existing term for this concept, I have been unable to find it.
77 For the last pair, see Steiner, “Ketiv-Kere.”
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.\textsuperscript{78}

Similarly, he interprets the use of $\chi$ to render $\pi$ in terms of $h$ rather than $^*\heta$:

The Septuagint translators, who were unable to render into the Greek language the letter heth which has the sound of a double aspirate, often added the Greek letter chi to instruct us that we ought to make an aspiration in words of this sort. So in this verse they translate Cham for what is actually Ham. . . .\textsuperscript{79}

[The Septuagint translators, by whom the divine Law was translated into the Greek language, added certain letters to represent especially the letter heth, and ain and others of the kind, because they were unable to give a Greek rendering of the double aspirate. So it came about that for Rahel\textsuperscript{80} they said Rachel, for Jericho Jericho, for Hebron Chebron, for Seor Segor.\textsuperscript{81}

Jerome even calls attention to the fact that the revisers of the LXX sometimes revise the rendering of $\pi$ in transcribed words. Thus, the word חֲזָרִים (derived from שָׁרִים, “earthenware,” according to Jerome) in Jer 19:2 is transcribed χαρσίθ in LXX but ορσιθ by “the three”:

For “gate of earthenware,” Aquila, Symmachus, and Theodotion put the same Hebrew word Harsith, to which the Septuagint (translators), in accordance with their practice, add Greek chi for the aspiration of the letter heth, so that they say Charsith for Harsith, and so too for Hebron Chebron, and for Jericho Jericho.\textsuperscript{82}

It is clear that Jerome views Harsith, Hebron, Jericho, and Aza as being more faithful renderings because these names were pronounced with pharyngeals, rather than uvulars, in his time. Sutcliffe concludes, correctly in my opinion, that these remarks show that Jerome was unaware that, in the time of the LXX, $\pi$ and $\varepsilon$ each had two values.\textsuperscript{83}

\textsuperscript{78} Liber Interpretationis Hebraicorum Nominum, 87; see also pp. 66–67 (Gomorrah), 72 (Segor).
\textsuperscript{80} Cf. פֶּנְא in M. Schwabe and B. Lifshitz, Beth She’arim (Jerusalem: Massada, 1973–), 2:94 no. 121. The majority of the catacombs at Beth She’arim come from the third century and the first half of the fourth century C.E., but see now H. Lapin, “Palestinian Inscriptions and Jewish Ethnicity in Late Antiquity,” in Galilee through the Centuries: Confluence of Cultures (ed. E. M. Meyers; Winona Lake, IN: Eisenbrauns, 1999), 240 and the literature cited there.
\textsuperscript{82} S. Hieronymi Presbyteri Opera, Pars I, 3; In Hieremiam (Turnholt: Brepols, 1960), 182. I am indebted to D. Berger for his assistance in translating this passage.
\textsuperscript{83} Sutcliffe, “Jerome’s pronunciation,” 118 and 121. So too A. Sperber, “Hebrew Based on
Finally, it is certain that the mergers occurred before Origen prepared his Hexapla (mid-third century C.E.). The Greek transcription of Psalms in the second column of the Hexapla normally has zero for ꔶ and ꔷ irrespective of their origin. Examples with original *허 and *허 include: אָֹדֹתָו = עַּלַּחַת (1:1), אָֹמָֹשָּ = מַּרַּשַּ (18:39), הָֹעַ = הָּרָּ (35:22), אָֹתָמֶ = הָּרָּ (49:11), חֶָּ = חָּ (59:38), חֶָּּ = חָּ (35:14), and אָֹלָּּ = אָּ (89:46). A possible exception is אָֹלָּּ = אָּ (35:19), if it is to be read אָֹלָּּ, as some have suggested.85 This could be an isolated relic of the use of ל to render א, since the Ugaritic cognate is שִׁ לוּ, “be glad, rejoice.”86 However, other scholars reject this emendation in favor of various emendations without ל.87

Pushing the terminus ante quem back beyond this point is no easy matter. Transcriptions of biblical names, etc., are available for the first and second centuries C.E. However, they are not as easy to interpret as the later transcriptions. They are inconsistent and, at times, even contradictory.

Our strategy will be to compare the transcriptions of Aquila and Josephus with those of the LXX—treating Ezra-Nehemiah = 2 Esdras separately, as recommended by Blau.88 It is true that the LXX is today believed to reflect the Hebrew reading tradition of Alexandrian Jews, who could, in theory, have preserved an archaic pronunciation that had disappeared in their former homeland.89 However, we have no reason to believe that this was the case in practice. Moreover, some of the Alexandrian translators may have been recent immi-

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85 O. Pretzl apud Brønno, Studien, 39; Sáenz-Badillos, “El hebreo,” 125.

86 Olmo Lete and Sanmartín, Dictionary, 825.

87 Brønno, Studien, 39–41.


89 See, e.g., R. C. Steiner, “Bytt·Yâ, Daughter of Pharaoh (1 Chr 4,18), and Bit(i)-'Anat, Daughter of Ramesses II,” Bib 79 (1998): 399–402. The Hebrew reading tradition of Babylonian Jewry exhibited a number of archaic features. Claims of this type have also been made for English and Swedish in America.
grants, much like the grandson of Ben-Sira, a Palestinian Jew who migrated to Egypt and translated the book of Ben-Sira there.

The comparison of Aquila and Josephus with the LXX presupposes uniformity not only through space but also, to a limited extent, through time. Our working assumption will be that, for the most part, $\chi$ and $\gamma$ continued to be used in the Roman period the way they had been in the Hellenistic period, viz., to render uvular fricatives (to the extent that they survived) but not pharyngeal ones. This assumption seems plausible and, as we shall see, it yields coherent results.

We begin with names that have $\varsigma$ transcribed with $\gamma$ in the LXX. For these names, the later sources exhibit dramatic change:

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<td>Ραχουηλος, Ραχουηλος</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>16. נראת</td>
<td>Ρε/αγμα</td>
<td>Ραμος, Ρεγμος</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>17. נראת</td>
<td>Θαργαλ95</td>
<td>Θαδαλος97</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>


91 One MS (L) has Ιεγλαμος.

92 One MS (L) has Χοδολλογομορος.

93 F. Wutz, Die Transkriptionen von der Septuaginta bis zu Hieronymus (Stuttgart: Kohlhammer, 1925–33), 1:139 (see below). I have been unable to find any other reference to this form.

94 Equivalent to Ṭudh aliya, a name borne by several Hittite kings. In Ugaritic, the name appears as ṭdg and ttg; see F. Gröndahl, Die Personennamen der Texte aus Ugarit (Rome: Päpstliches Bibelinstitut, 1967), 296; and Starke, Untersuchung, 145 n. 435.
Of the seven forms ascribed to Aquila in table 1, we find zero for ݂ in five. The other two have been adopted from the LXX; they are unchanged in every detail—not merely in the rendering of ݂. In the case of Γαζα, it is immediately obvious that it does not reflect the phonological reality of the reading tradition known to Aquila, since it retains the diphthong *ay in an unstressed syllable (contrast Ηβαλ, etc., etc.). As for Josephus, in the overwhelming majority of cases, he uses zero to render ݂ where the LXX used γ. Manuscript readings with γ are usually suspect on two grounds: (1) they occur alongside readings with zero, and (2) they are similar to LXX forms. Γαζα is no doubt authentic, but it has little significance, since it was the standard Greek name of the city, used also by Ptolemy (Geography 5.16.6) and Byzantine writers. We cannot rule out the possibility that a few of the other readings with γ are also authentic, perhaps reflecting the latest stage in the gradual disappearance of *g from the reading tradition(s).

In short, the evidence shows that *g was already largely or completely gone by the first century C.E.

The evidence for *h is far less consistent:

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96 See M. C. Astour, “Tidal,” ABD 6:551: “The original form of the name can be reconstructed as *tadgal, with the voiced pharyngeal [sic] g which had not yet merged with c in the pronunciation of Hebrew at the time of the LXX translation (r instead of d in LXX and Syr is due to the virtual identity of the two letters in the Aramaic square script . . .).” Is it possible that the substitution of r for d in LXX Θαργαλ and Peshitta يلش has a phonetic basis rather than a graphic one? According to H. C. Melchert, “Indo-European Languages of Anatolia,” in Civilizations of the Ancient Near East, ed. Sasson, 2155, “one difference between Cuneiform and Hieroglyphic Luwian is that the latter shows frequent ‘rhotacism’; that is, it replaces d (and often l) with r.” Was the rhotacized pronunciation of this Anatolian name somehow preserved by tradition together with the uvular realization of ݂?

97 One MS (L) has Θαργαλος.

98 L. Di Segni, “Dated Greek Inscriptions from Palestine from the Roman and Byzantine Periods” (Ph.D. diss., Hebrew University, 1997), 527, 694, 700, 709, 869. Josephus’s use of Γαζα = נו is no different from his use of other older forms familiar to his Greek readers, such as Βαβυλων(α) = בבל, Ελμος = שבת, Τανις = גזע, Εκδίπτυα = בדוכא, Ιταβοριον = יברון, etc.

99 Blau concludes that “it seems that in literary Hebrew ݂ subsisted for a considerable time, although becoming less and less frequent” (Polyphony, 70). On the other hand, he points to the far-reaching disappearance of *g in the Greek translation of Chronicles (Polyphony, 70), which is dated to the second century B.C.E. (see below).
### TABLE 2

<table>
<thead>
<tr>
<th>Hebrew</th>
<th>LXX</th>
<th>Josephus</th>
<th>Aquila</th>
<th>II Esdras</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a. אָבָא</td>
<td>אֵין</td>
<td>אֲבָא</td>
<td>אֲבָא, אָבָא</td>
<td>—</td>
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<tr>
<td>2a. אָבָא</td>
<td>אֲבָא</td>
<td>—</td>
<td>אֲבָא</td>
<td>—</td>
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<tr>
<td>2b. אָבָא</td>
<td>אֲבָא</td>
<td>—</td>
<td>אֲבָא</td>
<td>—</td>
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<tr>
<td>3. אָבָא</td>
<td>אֲבָא</td>
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<td>4. אָבָא</td>
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<td>5. אָבָא</td>
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<td>6. אָבָא</td>
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<td>7. אָבָא</td>
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<td>8. אָבָא</td>
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<td>9. אָבָא</td>
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<td>10. אָבָא</td>
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<td>11. אָבָא</td>
<td>אֲבָא</td>
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<td>אֲבָא</td>
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<tr>
<td>12a. אָבָא</td>
<td>אֲבָא</td>
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<td>אֲבָא</td>
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<td>13. אָבָא</td>
<td>אֲבָא</td>
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<td>אֲבָא</td>
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<td>14. אָבָא</td>
<td>אֲבָא</td>
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<td>15. אָבָא</td>
<td>אֲבָא</td>
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<td>16. אָבָא</td>
<td>אֲבָא</td>
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<td>אֲבָא</td>
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<tr>
<td>17. אָבָא</td>
<td>אֲבָא</td>
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<td>אֲבָא</td>
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<tr>
<td>18. אָבָא</td>
<td>אֲבָא</td>
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<td>אֲבָא</td>
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<tr>
<td>19. אָבָא</td>
<td>אֲבָא</td>
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<td>אֲבָא</td>
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<tr>
<td>20. אָבָא</td>
<td>אֲבָא</td>
<td>—</td>
<td>אֲבָא</td>
<td>—</td>
</tr>
</tbody>
</table>

100 So in five manuscripts; a sixth has Ἀκιάμος. The form “Ἀκιάμος” is an emendation.

101 For the absence of χ in this form, see Steiner, “H > H.” The Greek version (short and long recensions) of Tobit 1:21 has ᾲχαρόνας. The apheresis exhibited by this transcription agrees with Old Aramaic ḫaḥša (but not 4Q Tob ḫaḥša!); see A. Lemaire, Nouvelles tablettes araméennes (Geneva: Droz, 2001) 26, 31; and Fitzmyer, Tobit, 122. See also the examples of apheresis cited by S. Parpola, “National and Ethnic Identity in the Neo-Assyrian Empire and Assyrian Identity in Post-Empire Times,” Journal of Assyrian Academic Studies 18, no. 2 (2004): 16–17 and add the transcriptions of Aššur-bēn-aplu as Ṣerbēl (Amherst 63 XVII/6, XVIII/3) and Ṣarbōnāpal.  ᵃ

102 So all witnesses except for one, which has ḫaḥša.

103 Josephus appears to have used these variants to distinguish two individuals (see below). However, some manuscripts blur the distinction, using Ἐκραμως at times instead of Ἐρωμος.

104 So Reider and Turner, Index to Aquila, 320. Field (Origenes Hexaplorum, 2.1021; Zech 6:10) has Ὑλάδα.  ᵃ


106 One manuscript has Ἐκλίκιας. For the postbiblical use of these names, see below.

107 One witness has Ἡρεμ/αμ.
<table>
<thead>
<tr>
<th>Hebrew</th>
<th>LXX</th>
<th>Table 2 (cont.)</th>
<th>Josephus</th>
<th>Aquila</th>
<th>II Esdras</th>
</tr>
</thead>
<tbody>
<tr>
<td>21. תֵּרַי</td>
<td>כָּרָא</td>
<td>X/Kap(ρ)α</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>22. תַּמַּשַּי</td>
<td>χαρσιθ</td>
<td>—</td>
<td>αρσιθ</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>23. תַּחַטִּיאָו</td>
<td>Χετταίος</td>
<td>Χετταίος</td>
<td>Χετταίος</td>
<td>Εθ(θ)(ε)ι; Χετταίος</td>
<td>—</td>
</tr>
<tr>
<td>24. תַּבְּאֶק</td>
<td>Ταβαίος</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>25. וַיַּאַי</td>
<td>Ιωάχας/י</td>
<td>Ιωάξος</td>
<td>Ιω(α)/χαξος</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>26. וַיַּרְּי</td>
<td>Ιερ(ε)יו</td>
<td>Ιερίχους</td>
<td>Ιερείχω</td>
<td>Ιερ(ε)ια; Ιερ(ε)יו</td>
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<tr>
<td>27. וִימַנ</td>
<td>Μανוֹא</td>
<td>Μανωχης</td>
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<tr>
<td>28. וַיַּוָּא</td>
<td>נֹא</td>
<td>Νοξος</td>
<td>נֹא</td>
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<td>29. וַיֵּרְז</td>
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<td>נָאָר</td>
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<td>—</td>
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<tr>
<td>30. וַיֵּדֶצ</td>
<td>Ση</td>
<td>Ση/יו</td>
<td>Ση/יו</td>
<td>—</td>
<td>—</td>
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<tr>
<td>31. בֵּית</td>
<td>Σενנואכ uy(ε)μ</td>
<td>Σεν(ν)/αχ(ε)/ει-ρ(ε)μ/β(ος)</td>
<td>Σενηριβ</td>
<td>—</td>
<td>—</td>
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<tr>
<td>32. וַיֵּדֶצ</td>
<td>פָּאָס /ח</td>
<td>פָּא/εσ/א; פָּא</td>
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<td>33. בֵּית</td>
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<tr>
<td>34. פָּא</td>
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<td>פָּא</td>
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<tr>
<td>35. פָּא</td>
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<td>פָּא</td>
<td>פָּא</td>
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<tr>
<td>36. פָּא</td>
<td>פָּא</td>
<td>פָּא</td>
<td>פָּא</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

108 See above.
109 Presumably from מ$	ext{Taβae}$.
110 All witnesses have χ/εχ except for one Latin manuscript (S), which has Manue. See further below.
111 See below.
112 One Latin manuscript (S) has Naor.
113 Field (Origenis Hexaplorum, 1.315) gives Ση for Aquila, but the Syrohexaplaric basis for this reconstruction is not reliable for our question.
114 These forms occur only in Chronicles and (once) in Jeremiah. Elsewhere, we find Πασχα, the rendering of an Aramaic form.
115 Only Π/Φασχα.
116 Reider and Turner, Index to Aquila, 322 (Josh 5:10 Φασα; 2 Kgs 23:21–23 Φασα); Field, Origenis Hexaplorum, 1.296 (Deut 16:1 Φασα) and 1.345 (Josh 5:10 Φασα).
117 Only Πασχα.
118 It is usually assumed that this name is Egyptian and that the last syllable represents Hr, "Horus," but the Greek transcription with χ casts doubt on at least the second part of this assumption. See also n. 26 above.
119 Cf. Ραχήλ in Horbury and Noy, Jewish Inscriptions, 82–83 no. 96 (Leontopolis, mid-second century B.C.E.—early second century C.E.). See also n. 80 above.
In the Josephus column of table 2, we find readings with zero (alongside $\chi$ or not) for $\pi$ in 33 percent of the names (10 out of 30). By contrast, in the Josephus column of table 1, we find readings with zero (alongside $\gamma$ or not) for $\nu$ in 87 percent of the names (13 out of 15). Thus, the evidence of Josephus's transcriptions appears to corroborate Blau's conclusion that the loss of $^{*}{\acute{g}}$ was earlier than the loss of $^{*}{\acute{h}}$.$^{120}$ This chronological asymmetry goes hand in hand with distributional asymmetries. The voiced fricative $\acute{g}$ is found in fewer of the world's languages than $\acute{h}$, and it occurred less often than $\acute{h}$ in Hebrew. We may also compare Akkadian, where $^{*}{\acute{g}}$ was apparently lost$^{121}$ but $^{*}{\acute{h}}$ preserved. So too in many later Hebrew reading traditions, $\acute{g}$ (the spirantized realization of $\nu$) was lost, but $\acute{k}$ (the spirantized realization of $\pi$) was preserved.$^{122}$

In the Aquila column of table 2, we find readings with zero (alongside $\chi$ or not) for $\pi$ in 57 percent of the names (12 out of 21), almost twice as often as Josephus. This figure hardly tells the whole story. Many forms with $\chi$ in the Aquila column have clearly been adopted from the LXX; they are unchanged in every detail—not merely in the rendering of $\pi$. When we subtract those forms, we are left with the ones that presumably reflect the phonological reality of the reading tradition known to Aquila. They show that $^{*}{\acute{h}}$ had already disappeared from that tradition by Aquila's time (ca. 125 C.E.).

The difference between Josephus's transcriptions and those of Aquila is well summarized by Franz Wutz:

Fl. Josephus kennt beide Stadien: sowohl die völlige Preisgabe des Gutturalunterschiedes wie die doppelte Wiedergabe von laryngalem $\pi$. Ak' bekämpft geflissentlich die alte Schreibung, die er doch sehr gut kennt und fordert für das alte $\Gamma\omicron\omicron\omicron\omicron\omicron$—$\Lambda\omicron\omicron\omicron$—$\Lambda\alpha\zeta\alpha$ usw.$^{123}$

But what are we to conclude from this difference? Does it accurately reflect the progress of the change in the reading tradition(s)? It is normally perilous to use written records to date sound changes, because conservative scribal traditions—historical spelling and the like—can cause orthographic change to lag far behind phonological change.$^{124}$ Here, however, we are dealing with transcriptions. The latter provide more reliable information than the standard

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120 Blau, *Polyphony*, 70. According to Blau's table 3, the gap in time is more dramatic “in living language,” but it is also discernible “in literary language.”
121 See n. 7 above.
123 Wutz, *Transkriptionen*, 1:139.
orthography, because they are usually much less bound by tradition. Furthermore, Josephus’s transcriptions of ר provide an excellent control, eliminating most other explanations. Put differently, many theories that seem adequate to explain the contrast between 33 percent and 57 percent are not capable of explaining the contrast between 33 percent and 87 percent.

Even in isolation, Josephus’s transcriptions seem to exhibit change in progress. Sometimes the same name may appear in different forms, as in the case of בִּיתוּקְרָא versus בַּיְס/אָתָר/א/ו. We suggested above that בִּיתוּקְרָא may be a hypercorrection, reflecting the struggle to preserve *ר in the reading tradition after it was lost in speech.

We even find Josephus using different transcriptions for a single name borne by different individuals. Thus, in Ant. 8.3.4 §76, he distinguishes two biblical figures named ד(ד)אָנַ: “And Solomon summoned from Tyre, from the court of עָוֶָ, a craftsman named וּיְפָּ, who was of Naphthahite descent on his mother’s side . . . and whose father was Urias, an Israelite by birth.” Here Josephus deftly creates clarity out of confusion, assigning a different referent to each variant. In choosing the form עָוֶָ for the Tyrian king, he was no doubt influenced by Dias and Menander of Ephesus, the historians of Phoenicia whom he quotes in Against Apion (1.17 §§112–25). They call the king עָוֶָ rather than עָוֶָ because, by their time, *ר had long since merged with ר in Phoenician.126

The change in the reading traditions may have been accelerated, if not initiated, by the death and destruction that resulted from the rebellion against the Romans (66–74 C.E.). Born in 37 C.E., Josephus must have received his education well before the rebellion, even though he did not complete his Antiquities until 93 C.E.127

My conclusion, then, is that *ר did not complete its gradual disappearance from the biblical reading tradition(s) until the second century C.E. As for the beginning of the process, we must note that evidence from the LXX and the Qumran scrolls turns out, upon closer examination, to be questionable. Take, for example, Wutz’s assumption that the change is already exhibited by נַאָלִית = מִיאָלִית (Num 21:19) alongside נַאָלִית = הָרַשְׁנָה (2 Sam 23:30).128 Based on this assumption, he dates the beginning of the change to the second century B.C.E.:

However, as Blau notes, יִבָּשֵׂעָה is of uncertain etymology, since it may derive (or may have been taken by the translators to derive) from n-h-l, "inherit," rather than n-hl, "stream(-bed)." In Blau’s view, the merger makes its first appearance in the canonical Greek version of Ezra-Nehemiah, also known as 2 Esdras or Esdras B (in contrast to the apocryphal 1 Esdras or Esdras A).

In the Qumran scrolls, misspellings involving נא do not suffice to settle the matter one way or the other. Of the dozen examples of נא replaced by נ or נ in 1QIsaa (125–100 B.C.E.) and 1QS (100–75 B.C.E.), none involves *

That fact might perhaps be viewed as hinting at the preservation of *

On the other hand, in 4QJer XI 7 (225–175 B.C.E.) the word הֹרֹב, "terror, ruin" (Jer 17:17), seems to have been miswritten as [נַב] מְלֵי, with the omitted נ < *

E. Tov assumes that “the prima manu text probably represents a phonetic omission.” If so, the omission could be viewed as evidence for the merger of *

However, apart from this fragmentary and uncertain example, there are no examples of misspelling involving נ or נ in the text. This seems significant in view of what Tov writes about scribal corrections in the scroll: “The number of corrections in this text is exceedingly great. . . . No other Qumran text has as many corrections relative to the length of the document. . . .” In my judgment, we cannot rely on 4QJer in dating the loss of *

Wurtz, Transkriptionen, 1:139.

Blau, Polyphony, 58. In their interpretation of this name, the translators may have been influenced by personal names such as יִבָּשֵׂעָה, etc.

Blau, Polyphony, 43, 49, 65–67. For the date of 2 Esdras, see below.

The examples have been collected by E. Qimron for his forthcoming grammar of the Hebrew of the Dead Sea Scrolls. I am greatly indebted to him for providing me with a photocopy of the relevant pages and for further clarifications.

These dates, assigned by F. M. Cross more than forty years ago, are still accepted by recent writers; see D. N. Freedman and K. A. Mathews, The Paleo-Hebrew Leviticus Scroll (11QpaleoLev) (Philadelphia: American Schools of Oriental Research, 1985), 56; and C. Martone, La “Regola della Comunità”: Edizione critica (Turin: Silvio Zamorani, 1995), 14.

134 1QS VI 7 וּפִי הָסִיסל for וּפִי הָסִיסל does involve uvular *


Ibid., 153.

The loss of the pharyngeals in Hebrew is normally ascribed to the fact that Greek did not have pharyngeals. Greek did have consonants that were close in pronunciation to the uvulars.

Ibid., 151.
would force us to conclude that 

Similarly, in 11QPaleoLev IV 6 (ca. 100 B.C.E.), the word הָזִים, “their holding” (Lev 25:32), is miswritten as הָזִים, with omission of ה < ה (cf. Arab. ئیلاد, “land which a man takes for himself”).139 Here again the omission could be viewed as evidence for the merger of ה with ה. However, this mis-spelling needs to be evaluated in the light of the other misspellings in the same text: יל [ר] for יל, וַיִּתְמֶא for מִתְמֶא, יְלַמְדָּה for מְלַדָּה, and קָנָה for קָנָה.140 These omissions do not seem to have a phonological basis, and there are no other examples of mis-spelling involving ה or י in 11QPaleoLev. As a result, we cannot put too much weight on 11QPaleoLev in dating the loss of ה, even though a date after 100 B.C.E. would be quite compatible with the evidence presented below.

**Dating the Loss in Palestine: Spoken Hebrew and Aramaic**

Evidence from four sites—Jaffa, Masada, Jerusalem (Kidron Valley), and Gaza—can help us to establish a terminus ante quem for the loss of ה in spoken Hebrew and Palestinian Aramaic.141

From the necropolis at Jaffa (first centuries C.E.), we have the name אא, believed to be a transcription of יא.142 The name יא is well known from rabbinic literature; it is found also on an ossuary from Mt. Scopus (before 70 C.E.) and in inscriptions from the time of the monarchy.143 אא = יא is reminiscent of אא = יא in Aquila and אא = יא in 2 Esdras.144

From Masada (66–73 C.E.), we have two examples of ה written for ה among the 791 inscriptions found there: יַהַל for יָהַל (= יָהַל) and יַתָּא for יָתָא, “the baker.”145 By a fortunate coincidence, both of these examples involve ה.146 These spellings presuppose a sequence of two mergers; in all probability, we are dealing with ה > ה followed by ה > ה, not with ה > ה.147

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139 Freedman and Mathews, *Paleo-Hebrew Leviticus*, 44.
141 We assume that the loss of ה occurred in spoken Hebrew and Jewish Palestinian Aramaic at the same time. This assumption is plausible, since most speakers of Hebrew in the Hasmonean and Roman periods spoke Aramaic as well. See Beyer, *Aramäischen Texte*, 1:102.
142 J. B. Frey, CII 2:119, 125 no. 902.
144 See table 2 above.
146 Aramaic תֶּחַל, a borrowing of Akk. *muhatimmu*, “baker,” appears as מִתְמֶא m.k., “your baker” in Amherst 63 (V/5).
147 See n. 137 above.
From Jerusalem, we have the word "sepulchral chamber," attested in the Kidron Valley dipinto (first half of the first century C.E.). E. Y. Kutscher argued that this word, also attested in Mishnaic Hebrew, derives ultimately from Akkadian kinaḫḫu, “grave.” S. A. Kaufman took Kutscher’s theory a step further, claiming that the Jews borrowed this Akkadian word from the Nabateans. If so, the final ס of סָפֶכֶר renders the ס (“ח”) of Nabatean סָפֶכֶר, “sepulchral chamber.” This conjecture is plausible in view of Kutscher’s demonstration that the Nabateans preserved סח longer than the Jews, and that, after the Jews lost סח, they used ס to render Nabatean סח. Kutscher pointed to Nazir 1.1, 51a, לִשְׁנֵי נוֹהוֹת הָדוֹא דָּאָרְיָה וְלוֹחוֹ הַמִּסְמָא, “it is a Nabatean expression, for they call ספֶכֶר (pottery) סבֶכֶר.” This statement appears to contrast Nabatean Aramaic with Jewish Palestinian Aramaic. According to Kutscher, it means that the Nabateans pronounce the word for “pottery” as ספשא determined by the Nabateans. This presumption is plausible in view of Kutscher’s demonstration that the Nabateans preserved סח longer than the Jews, and that, after the Jews lost סח, they used ס to render Nabatean סח. Kutscher pointed to Nazir 1.1, 51a, לִשְׁנֵי נוֹהוֹת הָדוֹא דָּאָרְיָה וְלוֹחוֹ הַמִּסְמָא, “it is a Nabatean expression, for they call ספֶכֶר (pottery) סבֶכֶר.” This statement appears to contrast Nabatean Aramaic with Jewish Palestinian Aramaic. According to Kutscher, it means that the Nabateans pronounce the word for “pottery” as ספשא (written סבכש) instead of ספשא (written סבכש). His assumption that the Aramaic

150 Kaufman, Akkadian Influences, 431–43.
151 The initial ס of ספֶכֶר renders the ס of ספֶכֶר, either because the latter is a historical spelling for סח (Kaufman, Akkadian Influences, 64 n. 160) or because ססח would have been impossible, since ס is phonotactically incompatible with ס in Hebrew roots (K. Koskinen, “Kompatibilität in den dreikonsonantigen hebräischen Wurzeln,” ZDMG 114 [1964]: 33). Kaufman’s explanation is difficult to reconcile with J. Cantineau’s comparison (Le nabatéen [Paris: Leroux, 1930–32], 2.77) of Nabatean סבכש with Arabic סח, “fosse, fossé.”
152 Kutscher (סבכש, 276 = Studies, 436–37 [Hebrew section]); contrast Cantineau, Nabatéen, 1:44.
154 Kutscher, סבכש, 276 = Studies, 436–37 (Hebrew section). So already H. L. Fleischer, cited in J. Levy, Neuhebräisches und chaldäisches Wörterbuch über die Talmudim und Midraschim (Leipzig: Brockhaus, 1876–83), 2:453. The explanation is accepted by O. Cohen and D. Talshir, אל-ארד—ה分かる ולחללים הנוסכדים, Al-Atar 4–5 (1999): 145. It is unlikely that the Galilean author of the statement (R. Zeira or, according to y. Ned. 1.2, 37a, R. Simeon b. Laqish) was referring to the Nabateans of the Negev. According to B. S. J. Isserlin, Greek transcriptions of Nabatean/Arabian names from the Negev have zero for סח before the Muslim conquest (The Nessana Papyri: The Greek Transcriptions of Arabic, ALUOS 7 [1969–73]: 23). Thus, סח was lost there not only in Nabatean Aramaic but even in Nabatean Arabic! (The latter appears to have been influenced by the former in other respects as well, exhibiting p instead of f, g instead of g, e instead of u, etc.; see Isserlin, “Nessana Papyri,” passim.) As evidence that the zero-rendering of סח in the Negev goes back to the time of R. Zeira (ca. 300 C.E.) and R. Simeon b. Laqish (third century C.E.),
word originally was *ḥaspā with a uvular *ḥ is based on Arab. ḥazaf “(unbaked) pottery”;¹⁵⁵ the latter is probably derived from Aramaic ḥasϕ or the like, which in turn comes from Akkadian ḥaspu, “clay, sherd, pot.”¹⁵⁶ In short, the use of 𐤀, rather than 𐤊, to render *ḥ in the Kidron Valley dipinto is evidence that the Jews had lost uvular *ḥ by the middle of the first century C.E.¹⁵⁷

Finally, we have the name Αλφίος on a lead weight bearing the date “year 86.”¹⁵⁸ If the weight is from Gaza, as generally assumed, “year 86” corresponds to 26 C.E.¹⁵⁹ Alfio cannot be separated from the NT name Αλφαίος. T. Nöldeke noted that the latter is rendered יִלְּשָׂ ר in the Peshitta, and he conjectured that the literal meaning of the name was “my replacement” (spoken by the mother).¹⁶⁰ Subsequent scholars have followed his lead in equating the

we may note the Nabatean/Arabian name ἄλοξαφα = al-hulaifa on a pre-Christian tombstone from Elusa (A. Alt, Die griechischen Inschriften der Palästina Tertia westlich der ‘Araba [Berlin: de Gruyter, 1921], 27 no. 51), dated to 200–350 C.E. by A. Negev (“Personal Names in the Nabatean Realm,” Qedem 32 [1991]: 130). On the other hand, in the Ḥavrin region of Syria (Roman Auranitis), we find χ for *ḥ in the Nabatean/Arabian names Χάλλιτος = הלאי and Χαμράη = חער; see M. Lidzbarski, Ephemeris für semitische Epigraphik (Giessen: J. Ricker, 1902–15), 1:219 no. 41 and Cantineau, Nabatéen, 1:44 and 2:97. Thus, R. Zeira or R. Simeon b. Laqish may have been referring to the Nabateans of that region.

¹⁵⁵ Kutscher, יִשְׂר, 276 = Studies, 436 (Hebrew section).
¹⁵⁶ S. Fraenkel, Die aramäischen Fremdwörter im Arabischen (Leiden: Brill, 1886), 169; Kaufman, Akkadian Influences, 54. This is not the only Akkadian word connected with pottery that came into Arabic, via Aramaic, with a uvular ḫ. We also find Akk. ṭaḥāru, “potter” > Arab. fahār, “(baked) pottery,” and Akk. ḥabbā, “earthenware jug” > Arab. ḥabīya, “a large jar.”

¹⁵⁷ Given the evidence of y. Nazir cited above, it is not necessary for the purposes of this article to decide whether or not 𐤀 already had a postvocalic fricative realization in Palestinian Aramaic, that is, whether or not spirantization of ḫ had already occurred.


¹⁶⁰ T. Nöldeke, Beiträge zur semitischen Sprachwissenschaft (Strassburg: Trübner, 1904), 98. So too M. Maraqten, Die semitischen Personennamen in den alt- und reichsyrischaramäischen Inschriften aus Vorderasien (Hildesheim: Olms, 1988), 165. Contrast Ilan, Lexicon, 1:24 §2.4.1.3 and 1:382. Nöldeke’s discussion has apparently been overlooked by NT scholars. F. E. Wheeler writes: “Identifying Alphaeus with Clopas/Cleopas is based on the claim that they are variations of a common Aramaic original. . . . Since the form of the original has not been established, such an argument offers little support for identifying Alphaeus with Clopas” (“Alphaeus,” ABD 1:162).
more usual form, Αλφιος, with Ἑλληνικά. The latter appears at Masada (66–73 C.E.) and in the synagogue at Engedi. The last letter of Ἑλληνικά represents a suffixed pronoun (rather than, say, the nisba ending), like the last letter of the name Ἑλληνικά, “our replacement/successor,” common in Aramaic ostraca from Idumea (fourth century B.C.E.). cf. Jewish personal names such as Ἐμαχ, “my father,” and Ἐματζ, “our father.” The initial consonant of the name is Ἑ, as in Arab. یتاءل, “successors,” the Safaitic and Sabaic name Ἡτίν, the Ugaritic name Ἡπν, etc.

By another fortunate coincidence, the name Ἑλληνικά also provides us with a terminus post quem, for it appears as Χαλφί in the Greek version of 1 Maccabees (11:70). In that work, the opposition between Ἑ and Ἑ is still perfectly preserved. Some of the names may have been borrowed from the earlier LXX tradition, e.g., Χεβρων and Ἰεριχων vs. Ἀνανίας, Ἀσσωρ, Ἀδεσσα, Ἀμοθ-, Βαηθωρων, Ἰοαννης, and Φινεες. Other transcriptions are not found in the LXX and hence are less likely to be phonetically anachronistic, e.g., Χαλφί vs. Ασιδαιος and Ουαις. Now, the Greek version of 1 Maccabees cannot be much earlier than 100 B.C.E. Thus, the shift in the transcription of Ἑλληνικά from

161 H. Wuthnow, Die semitischen Menschenamen in griechischen Inschriften und Papyri des vorderen Orients (Leipzig: Dieterich, 1930) 18, 141; Negev, “Personal Names,” 132, cf. 29–30; Tzaferis, “Greek Inscriptions,” 83*, 85* n. 10; Di Segni, “Dated Greek Inscriptions,” 915. This Syro-Palestinian name is not to be confused with the Roman gentilicium Alfius, for which see H. Cancik and H. Schneider, Brill’s New Pauly (Leiden: Brill, 2002), 504.
162 Ilan, Lexicon, 1:381–82; Masada, 1:27 no. 427.
163 J. Naveh, Αραμαϊκά ονόματα: έρευνες και αναθεώρηση μετά τον θρόνο του Άρτακ (Jerusalem: Israel Exploration Society, 1978), 107 no. 70 (3x). According to Frey (CII 2:168 no. 982), the name also appears in a synagogue inscription from Capernaum, but Naveh (אַרְמַנִיאַכ אַבַּר זַל מַאְשַר דִּי אָשֶר, 35–39 no. 18) reads אַבַּר זַל מַאְשַר דִּי אָשֶר.
165 Masada, 1:20 no. 350.
166 Lemaire, Nouvelles inscriptions, 100; Maraqtan, Semitischen Personennamen, 165.
167 Derived from מְרִית, which appears as ḥ.syt in Amherst 63 (XI/18). See Nims and Steiner, “Paganized Version,” 269.
168 Other possible examples of zero for ḥ are איבר (1 Macc 2:5, rendered מְרִית in Peshitta; cf. Arab. یتاءل, “whiteness”), ᾶπάους (1 Macc 2:5, rendered מְרִית in Peshitta), ᾶβαουוς (1 Macc 16:11, rendered מְרִית in Peshitta; cf. Arab. یتاءل, “beloved”).
169 Most scholars believe that the Hebrew original was composed toward the end of the second century B.C.E.; see T. Fischer, “Maccabees, Books of,” ABD 4:441, and the literature cited there. As for the translation into Greek, “the usual view is that the Greek of 1 Macc was done by/for the Hasmonaean themselves, presumably not long after 1 Macc itself was written” (e-mail communication from S. J. D. Cohen dated August 24, 2004). Cf. F. Bechtel, “Maccabees, Books of,” Catholic Encyclopedia (New York: Appleton, 1907–12), 9:496: “The Greek translation was probably made soon after the book was written.”
**Calfi** to **Alfio** took place in the first century B.C.E. or the early first century C.E.

We have narrowed down the period in which *h* was lost to ca. 100 B.C.E.–26 C.E. It must be stressed that this dating is valid only for *h* in spoken Hebrew and Palestinian Aramaic. It is not valid for *h* in biblical reading tradition(s) or in Mesopotamian Aramaic. Nor is it valid for *g*. Evidence for dating the loss of the latter in the spoken language is very difficult to find. We may note the name **Zehra** = **8הָרֹע** found on an ossuary and thus dated to before 70 C.E. A. Dolgopolsky cites **μαγαρόν/μέγαρον**, “ritual crypt/pit” = **מַעֲרַה** (cf. Arab. **mağārah**, “cave”) in Greek texts of the fourth century B.C.E. and later, but É. Masson (Dolgopolsky’s source) finds serious problems with this identification. Blau argues that *g* was lost in the spoken language not long after Genesis was translated into Greek.

Our conclusion concerning the loss of *h* differs in important respects from two recent suggestions for dating the change. Concerning Hebrew *h* ≠ *h*, Dolgopolsky argues that “the transcription found in the LXX (as well as in Josephus Flavius’s writings and the NT) was based on a tradition of Gk. transcription current among Jews of those times and based on pronunciation which had existed several centuries before the LXX.” K. Beyer believes that, in all dialects of Aramaic, “wurden um 200 v. Chr. *h* > *ḥ* und *g* > *ţi*.”

In my opinion, Dolgopolsky’s theory is seriously flawed. He argues that his “hypothesis is confirmed by cases of transcription contradicting the etymology.” However, most of the cases he cites are from 2 Esdras, even though he twice alludes to Blau’s view that 2 Esdras is later than the rest of the LXX. Moreover, his claim that the transcriptions of the LXX (and Josephus) are anachronistic has little to recommend it. How is it possible for “a tradition of Gk. transcription current among Jews” of the third century B.C.E. (when the Pentateuch was translated into Greek) to be “based on pronunciation which

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170 See n. 32 above.
171 Ilan, *Lexicon*, 1:75. Note also **Abou' Zehra**, “Abun, the younger,” on a tombstone from Khushniyye in the Golan Heights (R. C. Gregg and D. Urman, *Jews, Pagans, and Christians in the Golan Heights: Greek and Other Inscriptions of the Roman and Byzantine Eras* [South Florida Studies in the History of Judaism 140; Atlanta: Scholars Press, 1996], 184–85 no. 151). Gregg and Urman fail to note that **Abou' Zehra** bears the same name as **אָבָעַ צֶהֶרַ (כָּאָבֹ הָרֹע)*** in y. Šeb. 4.2, 35a.
173 Blau, *Polyphony*, 39 n. 69, 70.
177 Ibid., 69 and 154 n. 16. See at n. 199 below.
had existed several centuries” earlier, that is, before the Jews began to use Greek.\footnote{178}

Both Dolgopolsky and Beyer accept the widespread assumption that these mergers must precede spirantization, there being no trace of confusion between spirantized $k$ and $^{*}h$ or between spirantized $g$ and $^{*}g$.\footnote{179} Since Beyer dates the beginning of spirantization to the first century B.C.E.,\footnote{180} it is legitimate to ask why there must be a gap of a century or more between the two developments. The question becomes more acute when we examine Beyer’s evidence for dating spirantization. His earliest signs of spirantization come from Qumran scrolls “der Zeit um Christi Geburt,” that is, two centuries after his date for the mergers.\footnote{181} There is no need for such a large gap.\footnote{182} If it is legitimate to assume that spirantization of $z$ began in the late first century B.C.E. (and I stress the word “if”),\footnote{183} there is no reason why the loss of $^{*}h$ could not have begun in the early first century B.C.E.

A second assumption shared by Dolgopolsky and Beyer (although never stated explicitly) is that the entire $bgdkpt$ class—not just $k$ and $g$—resisted postvocalic spirantization until the old uvular fricatives $^{*}h$ and $^{*}g$ were lost. It is this assumption that makes it possible for Beyer to use $b ~ w$ alternations to date the spirantization of $k$ and $g$.\footnote{184} However, the assumption is undermined by evidence from the Samaritan reading tradition. In describing that tradition, early Samaritan grammarians speak of the double realization of $bpdwt$ rather than $bgdkpt$.\footnote{185} According to Z. Ben-Hayyim, $k$ and $g$ never developed spirantized allophones in Samaritan Hebrew.\footnote{186} If that is the case, the reason must be

\footnote{178} For the originality of Josephus’ transcriptions, apparent in tables 1–2 above, see Murtonen, Hebrew in Its West Semitic Setting, 1:29–30.

\footnote{179} Dolgopolsky, Proto-Semitic to Hebrew 67, 74; Beyer, Aramäischen Texte, 1:102. So G. Bergsträsser (Hebräische Grammatik [Leipzig: F. C. W. Vogel, 1918], 40) and many other scholars. For critiques of this assumption, see Blau, Polyphony, 74–75; and R. C. Steiner, “Simplifying Assumptions and the History of Spirantization in Aramaic and Hebrew,” to appear in Festschrift Moshe Bar-Asher.

\footnote{180} Beyer, Aramäischen Texte, 1:102, 126.

\footnote{181} Ibid., 1:128.

\footnote{182} For the assumption that the two changes were causally related, as a chain shift, see E. A. Speiser, “Concatenated Sound-shift in Canaanite.” JBL 58 (1939): vi–vii. If this was a “push-chain” (with $^{*}h$ “pushed” out of the way by the newly spirantized $k$) rather than a “pull-chain” (with spirantization of $k$ blocked until $^{*}h$ got out of the way), there was no gap at all. In the push-chain scenario, we have an example of הַגַּחַא הַגַּחַא הַגַּחַא הַגַּחַא הַגַּחַא הַגַּחַא הַגַּחַא הַגַּחַא הַגַּחַא הַגַּחַא הַגַּחַא הַגַּחַא הַגַּחַא H (Isa 24:18), for in fleeing from one sound ($k$), $^{*}h$ collides with another ($h$).

\footnote{183} See Steiner, “Simplifying Assumptions.”

\footnote{184} Beyer, Aramäischen Texte, 1:127–28; cf. Dolgopolsky, Proto-Semitic to Hebrew, 73. My discussion of Samaritan Hebrew in the remainder of this paragraph is from my forthcoming “Simplifying Assumptions.”

\footnote{185} Ben-Hayyim, מַעֲשְׂרָה, 5:21–22 = Grammar, 34.

\footnote{186} Ben-Hayyim, מַעֲשְׂרָה, 5:22–23 = Grammar, 34.
that the spirantization of the velar stops was blocked by the preservation of *h and *g. Put differently, Samaritan speakers opted to forgo “ease of articulation” when pronouncing k and g after vowels, in order to avoid a conditioned merger with *h and *g. Thus, they were careful to enunciate the final consonant of pak, “flask,” as a stop, in order to prevent confusion with pah, “bird-trap, snare” (cf. Arab. fahl, “snare,” and Egyptian ph, “bird-trap”). The uvulars were eventually lost in Samaritan Hebrew, but by that time, it seems, spirantization was no longer productive.

**Diffusion from Phoenicia and the Hasmonean Conquest of the Galilee**

In merging the uvular fricatives with the pharyngeal fricatives, Hebrew was following in the footsteps of its northern neighbor, Phoenician. Were the Hebrew mergers carried out independently, or were they the result of diffusion from Phoenicia? The latter alternative seems attractive in the case of *h > h. Our discussion of the date of this merger suggests the possibility that it may have had something to do with the Hasmonean conquest of the Galilee at the end of the second century B.C.E. Phoenician influence was strong there, especially in the northern part, Upper Galilee. There were probably many speakers of Aramaic and Hebrew there who had merged *h with h under the influence of Phoenician. Some of these were Itureans from the Lebanon region (Strabo, Geography 16.2.18 §755) who had infiltrated into Upper Galilee; we learn from Josephus that Judah Aristobolus “made war on the

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187 The merger of b with w in Samaritan Hebrew is not entirely comparable. It is an unconditional merger, perhaps due to Greek influence.

188 For the Egyptian, see Y. Muchiki, Egyptian Proper Names and Loanwords in North-West Semitic (SBLDS 173; Atlanta: Society of Biblical Literature, 1999), 253.


191 See Hanson, Tyrian Influence, 67: “Linguistically, the Jewish population used Aramaic predominately and Hebrew considerably. There was much less use of Greek there than in the Galilee district immediately to the south.”

192 See n. 5 and at n. 126 above. See also the statement in b. ‘Erub. 53b that the Galileans “are not precise in (their use of) language” (אֶרִיב, הַמֵּדֶם רֵעָה), since they fail to distinguish רַבֶּן, “wine”; רַבֶּן, “donkey”; רוּפ, “wool”; and רַבֶּן, “lamb.” Does this contain an echo of an earlier era when only רַבֶּן ("h") and רוּפ ("h") were homonyms?
Ituraeans . . . and compelled [them], if they wished to remain in their country, to be circumcised and to live in accordance with the laws of the Jews” (Ant. 13.11.3 §319). Others were Jews from Jerusalem who received estates in the Galilee in the wake of the Hasmonean conquest. The children of these Jerusalemite Galileans may have spread the Phoenician innovation to their cousins in Jerusalem.

The most prominent of these children was Alexander Jannaeus, whom John Hycanus had “brought up in Galilee from his birth” (Ant. 13.12.1 §322). It would be natural for Jannaeus to have acquired a Galilean “accent” during his childhood, and for his pronunciation to have been widely imitated once he became king. Jannaeus’s reign (103–76 B.C.E.) would therefore have been the perfect time for the loss of ꞌh to become widespread in Jerusalem.

This theory receives support from Pesher Habakkuk, a work that was probably composed during Jannaeus’s reign (or slightly later) and may even allude to him. In 1QpHab XI 6, we find a Hebrew form התב (~ התב), also known from Mur 42:4 (Bar-Kokhba) and (alongside התב) rabbinic literature. I have argued elsewhere that התב, which has frequently been compared to Phoenician-Punic התב (not to mention עשת, ובית and בת), is an example of Phoenician influence on Hebrew, because the development of a prothetic vowel with the preposition ס but not the prepositions ל and ב makes good phonetic sense in Phoenician but not Hebrew.

196 The argument (Steiner, “Albounout,” 102) may be briefly summarized as follows: (1) in Phoenician-Punic, prothetic vowels appear before initial consonants vocalized (before deletion) with ꞌi rather than ꞌa and (2) in Phoenician-Punic, -ס, unlike -נ and -ונ, was vocalized (before deletion) with ꞌa rather than ꞌn, while in Hebrew all three prepositions were vocalized with ꞌa. For ba-rather than bi-, see the names קא-ב-א-ר-ד-יל, בר-א-ר-ד-יל, etc. attested in various Neo-Assyrian texts. These Northwest Semitic names, related to Akk. Gabbu-naq-t-il and Ina-naq-t-il (Old Babylonian), appear in Aramaic, Hebrew, and Ammonite in alphabetic script (גי-ב-א-ר-ד-יל and בא-ר-ד-יל; see K. L. Tallqvist, Assyrian Personal Names (Helsingfors: Reprografische Nachdruck, 1914), 78, 100, F. Vattioni, “I sigilli ebraici,” Bib 50 (1969): 361; M. Ohana and M. Heltzer, מפרשים הסמאר (Haifa: University of Haifa Press, 1978), 37; Maraqten, Semitischen Perso-
The geographical diffusion of phonological innovations, even across language frontiers, has been much discussed in historical linguistics and dialectology since the nineteenth century, when the so-called wave theory of language change was proposed. It has also been pointed out that, thanks to its ports, Phoenicia was an important center of linguistic innovation, exercising “linguistic control over southern Syria-Palestine.” What is noteworthy here, if our conjecture is correct, is the glacial pace of the diffusion, with the merger taking more than a millennium to reach Jerusalem.

What of \( ^{\circ}g > ^{\circ}h \)? That merger appears to have occurred well before the Hasmonean conquest of the Galilee. Is it also due to Phoenician influence, or did it occur independently in Hebrew? That question will have to remain for future research.

IV. The Date of 2 Esdras

An interesting by-product of Blau’s investigation of \( ^{\circ}g \) and \( ^{\circ}h \) was the discovery of evidence for a relative dating of 2 Esdras: “It is quite certain that, among those books of the Bible containing a sufficient number of proper nouns to be representative, the last books to be translated into G[reek] were E/N; this is quite clearly proven by the absence of \( \gamma \) and \( \chi \) transcribing \( ^{\circ}g \) and \( ^{\circ}h \) [sic, for \( ^{\circ}h \)] respectively in their genuine transcriptions. . . .” Table 2 shows this conclusion to be an understatement. In the 2 Esdras column, we find zero for \( \pi \) in eight out of nine cases—around 89 percent of the time, as compared with Aquila’s 57 percent and Josephus’s 33 percent. Thus, the translator of Ezra-Nehemiah outdoes not only the rest of the LXX but also Josephus and even Aquila in transcribing \( ^{\circ}h \) with zero. It behooves us, therefore, to explore the

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nennamen, 71–72, 136–37; F. M. Fales, “West-Semitic Names in the Šeḥamad Texts,” SAAB 7 (1993): 146–47; and S. Farpolea et al., The Prosopography of the Neo-Assyrian Empire (Helsinki: Neo-Assyrian Text Corpus Project, 1998–), 2:635–36. In the modern Samaritan Hebrew reading tradition, the prothetic vowel of \( \text{Ab} \) (e.g., \( \text{abyom} = \text{!wyB} \)) has spread to \( \text{Al} \) (e.g., \( \text{alyom} = \text{!wyl} \)) but not to \( \text{Ak} \); Ben-Hayyim, √ תורמק נבטי, 5:239–40 = Grammar, 316. This development is probably connected with the Samaritan pronunciation of the preposition \( \text{מָשָׁה} \) as \( \text{al} \).

197 Garr, Dialect Geography, 235.

198 Assuming that the Northwest Semitic dialect written with the reduced version of the Ugaritic alphabet was Phoenician; see at n. 5 above. For a case of diffusion in Dravidian spanning two millennia, see A. M. S. McMahon, Understanding Language Change (Cambridge: Cambridge University Press, 1994), 51–52.


200 It is also instructive to compare 2 Esdras with Josephus in lines 4, 5, 11, 18, 23, 26, and 32 of table 2, and 2 Esdras with Aquila in lines 5, 18, 23, 26, and 33.

possibility that the canonical Greek translation of Ezra-Nehemiah is later than Aquila.

This is not the first time that such a late date has been suggested for that work. Over the past three centuries, 2 Esdras has been attributed to Theodotion by many scholars,202 most notably C. C. Torrey.203 According to Torrey, “Theodotion’s translation of Chron.-Ezr.-Neh. was not made until (at least) the middle of the second century A.D.”204 somewhat later than Aquila’s translations. This is not the place to give a full account of the controversy surrounding this theory.205 Nevertheless, some aspects of the debate must be mentioned.

One bone of contention is the account of the history of David and Solomon given by the Hellenistic Jewish historian Eupolemus in the middle of the second century B.C.E. Torrey and G. Gerleman agree that this account came from a Greek version of Chronicles, but they differ on the identity of that version. Torrey believes that it came from an early Greek translation of Chronicles only two chapters of which have been preserved, at the beginning of 1 Esdras.206 Gerleman, on the other hand, argues that Eupolemus’s source was Paralipomena, our canonical Greek translation of Chronicles.207

Gerleman’s argument, if correct, might appear to undermine Torrey’s dating of 2 Esdras, since Torrey believes that 2 Esdras and Paralipomena form a single work, produced by the same translator(s). However, Gerleman also argues, following B. Walde, that Paralipomena and 2 Esdras are separate works.208 This latter view is further supported by the transcription of \( \pi \) and \( \varsigma \) in these books. According to Wutz:

Im grossen und ganzen hat sich diese Scheidung in der Eigennamenschreibung erhalten bis zur Chronik, erst die Bücher Ezra-Neh. haben sie definitiv aufgegeben z. B. Αθλεί - Γοθλεί (Par.) \( \pi \)πη Αϊτοβ - Αχείτοβ sonst.209

Blau adduced many more examples of this contrast between Paralipomena and 2 Esdras.210 We may add that it is not only the names in Paralipomena that

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204 Ibid., 91.
exhibit $\chi$ for $^*\text{h}$. The same transcription is found in common nouns and verbs (or, at least, words understood as such by the translator): 1 Chr 18:8 μεταβαθύματα = תַּבָּחָה (cf. Ug. $t$-b-$\text{h}$, “sacrifice, butcher,” etc.),211 21:20 μεθοχαβήν = מְזוּבַּחְנה, “hiding” (cf. Arab. $t$-ḥabbā‘a, “hide”), 2 Chr 25:18 ἀχουρά = מְזוּבַּח, “the thistle” (cf. Akk. $\text{ḥaḥi(n)mu}$, “a thorny plant”).212 The form φούσσωθ = φούσσα (ketib) in 2 Chr 26:21 may be an exception (cf. Ug. $b$t ḫṣṭt),213 but if so, it is an exception found also in LXX 2 Kgs 15:5.

It seems clear, therefore, that Paralipomena is separate from, and earlier than, 2 Esdras. Hence, a finding that Paralipomena existed already in the middle of the second century B.C.E. tells us nothing about the date of 2 Esdras. Torrey could still be right about the latter, for, in the words of L. C. Allen, “Par must be evaluated independently of II Esdr.”214

A century of research has undermined Torrey’s theory in another key area. Torrey’s Theodotion—a man who flourished in the middle of the second century C.E. and whose “chief characteristic [was] his tendency to transliterate the difficult or doubtful words of his Hebrew text”—215—no longer exists as a historical figure. Thanks to D. Barthélemy, much of the work previously ascribed to the post-Aquila Theodotion—including the transcriptions of difficult words—is now commonly dated within the period 50 B.C.E.–50 C.E.216 This revised dating has left 2 Esdras in limbo. Barthélemy was unable to reach any firm conclusion concerning 2 Esdras, and the book, together with Torrey’s theory, has been ignored by most of Barthélemy’s successors.217 One of the few recent studies of 2 Esdras known to me concludes only that “the translation of 2E was contemporary with or later than the work of the καίγε group.”218

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211 Olmo Lete and Sammartín, Dictionary, 887.
212 As pointed out in n. 11 above, Akkadian evidence for West Semitic $\text{h}$ needs to be corroborated by other evidence. As corroborating evidence, we may note that, according to $\text{AHw}$ 308, Akkadian has both a $\text{ḥahli}$ III “Dorn(stauch), Haken?” and a $\text{ḥahli}$ II “Pflaume(n-baum).” If these two lexemes have a common origin, they are both cognates of Syrian Arabic $\text{ḥauh}$, “plum.”
213 Olmo Lete and Sammartín, Dictionary, 402.
214 Allen, Greek Chronicles, 1:16.
215 Torrey, Ezra Studies, 69.
216 Tov, “Septuagint,” 182–83; P. J. Gentry, “The Place of Theodotion-Job in the Textual History of the Septuagint,” in Origen’s Hexapla and Fragments (ed. A. Salvesen; Tübingen: Mohr Siebeck, 1995), 229. There is no simple answer to the question asked by T. McLay in a recent article (“It’s a Question of Influence: The Theodotion and Old Greek Texts of Daniel,” in Origen’s Hexapla and Fragments, 231): “Who is Theodotion and what is the extent and nature of his work?” Fortunately, the question is not crucial for our study.
218 Ibid., 168. The question of dating is not even mentioned in Hanhart, Text und Textgeschichte.
In the absence of any new consensus about the date of 2 Esdras, we must return to the wreckage of Torrey’s theory to see what can be salvaged. Two observations made by Torrey seem to have stood the test of time: (1) Josephus uses 1 Esdras, but not 2 Esdras, as a source for his Antiquities,219 and (2) there are no Hexaplaric readings ascribed to any of “the three” for 2 Esdras (in contrast to Paralipomena).220 To these two, we add: (3) “a large number of Hebrew-Greek equivalences typical of Aquila are consistently employed by 2 Ezra,”221 and (4) the translator responsible for 2 Esdras transcribes $h$ with zero more often than Josephus and even Aquila.222 Taken individually, each of these facts can be explained away,223 but taken together they suggest that 2 Esdras was produced in the middle or end of the second century C.E.

V. The Date of the Greek Version of Judith

When was Judith translated into Greek? According to C. A. Moore, “the translation was made no later than the 1st century A.D., since Clement of Rome (30–99) alluded to Judith in 1 Clem 55:4–5.”224 Transcriptions of $h$ can help us push back this terminus ante quem.

The translator of Judith normally uses $\chi$ for $h$, e.g., $\chi\varepsilon\lambda\omicron\upsilon\varsigma = \gamma\nu\lambda\omicron\nu$ (1:9), $\chi\omega\beta\alpha = \nu\varepsilon\rho\omicron\upsilon\omega\nu$ (?), $\lambda\epsilon\rho\iota\chi\omicron\sigma = \nu\nu\rho\omicron\upsilon\sigma\rho$ (4:4), $\chi\alpha\iota\upsilon\omicron\rho = \rho\alpha\iota\varsigma\alpha\varsigma$ (5:5, etc.). The only apparent exception is in the list of Judith’s ancestors (8:1), where we find an $\varepsilon\lambda\kappa\iota\alpha = \pi\varphi\rho\lambda\nu$ as well as a $\chi\varepsilon\lambda\kappa\iota\alpha\varsigma = \pi\varphi\rho\lambda\nu$; however, a few Greek manuscripts (supported by the Syriac version) read $\varepsilon\lambda\kappa\alpha\nu\alpha$ for the former.

Let us examine two of the above transcriptions more closely, comparing them with Greek transcriptions of the same names in literary sources of the first century C.E. $\chi\varepsilon\lambda\omicron\upsilon\varsigma$225 (Jdt 1:9) renders the Hebrew name226 of Elusa, a prominent Nabatean town in the Negev. The town’s Arabic name appears (with
a definite article) as al-Ḥalāṣ in the Nessana papyri and in R. Saadia Gaon’s translation of the Torah, where it is identified with Gerar. Its Aramaic name appears (also with a definite article) as ܐܠܗܠܐ in the Palestinian targumim (Targum Neofiti to Gen 16:7, 14, Exod 15:22; Fragment Targums to Exod 15:22; Pseudo-Jonathan to Gen 16:14, Exod 15:22) and Genesis Rabbah (to Gen 16:7); in these sources, it is identified with Shur and Bered. Josephus’s transcription of the name is Ἀλουσᾶ (Ant. 14.1.4 §18), reflecting the merger of *h with h in Palestinian Aramaic (Jewish and Nabatean). Ptolemy’s Geography (5.16.10) has Ελουσα, as do the Byzantine sources.

Χωβά (Jdt 4:4 and 15:5; cf. Χωβα in 15:4) is another toponym that may be relevant to our discussion, assuming that it does not come from the LXX. If Χωβά represents Ἰωβᾶ (as it does in LXX Gen 14:15) rather than Ἱωβᾶ, the chances are good that we are dealing with *h. Regardless of the true etymology of the toponym ḫḇwḥ, it would have been difficult for the translators to resist connecting it with Aramaic ḫḇwḥ, ḫḇw’h, “debt, sin,” which appears with h in Amherst 63 (X/13), in the expression μῆρι ὑπολογίagrams, as do the Byzantine sources.

The evidence considered above makes it likely that the Greek version of Judith is earlier than Josephus’s works. If Ἐλκανά (rather than Ἐλκανας) is the original reading in 8:1, we may say that the translator was completely consistent in transcribing *h with χ, as was the translator of 1 Maccabees. Now, Moore argues that the Hebrew original of Judith was a Hasmonaean work from the end of the second century B.C.E., around the time that the Hebrew original of 1 Maccabees is believed to have been composed. Although there are many uncertainties, it seems reasonable to conjecture that the Greek translation of

227 Cohen and Talshir, ḫḇwḥ, 145. For the later Arabic name of the town, al-Ḥalayyah, see Press, בַּרְיָדָה, 259.
229 Some manuscripts have Λουσάς.
230 For the loss of Nabatean Aramaic *h in the Negev and specifically at Elusa, see n. 154 above.
232 Moore, Judith, 149.
233 Ibid.
235 See n. 169 above.
Judith, like that of 1 Maccabees, was also a product of the Hasmonean period. The use of the form $x\ell\alpha\upsilon\zeta$ (= Hebrew $\aleph$) instead of $*x\ell\alpha\upsilon\zeta\alpha$ or $\ell\alpha\upsilon\zeta\alpha$ (= Aramaic $\aleph$) may hint that the translator shared the affinity of the Hasmoneans for the national language.

VI. Conclusions

The old uvular fricatives, $^\partial h$ and $^\partial g$, survived in Hebrew and Western Aramaic throughout the biblical period, but they disappeared at different times. The merger of $^\partial h$ with $h$ is later than the merger of $^\partial g$ with $\zeta$. The earliest evidence for $^\partial h > h$ in spoken Hebrew and Western Aramaic comes from the Masada inscriptions (66–73 C.E.), the Kidron Valley dipinto (first half of the first century C.E.), and a lead weight from Gaza (26 C.E.). However, the merger may have taken place well before the first century C.E. Evidence for the retention of $^\partial h$ in the spoken languages seems to peter out in ca. 100 B.C.E.

The latter date suggests the possibility that the loss of $^\partial h$ had something to do with the Hasmonean conquest of the Upper Galilee at the end of the second century B.C.E. Phoenician influence was very strong in that region; there were probably many speakers of Hebrew and Aramaic there who had merged $^\partial h$ with $h$ in imitation of Phoenician. Once these speakers came under Hasmonean rule, the way was open for the innovation to spread gradually to Judea over the course of the following century. Another Phoenician innovation that appears to have made its way south in this period is the form $\tau\beta\alpha$ [abbe:t] = $\tau\beta\beta$; it is attested in Pesher Habakkuk, whose composition has been dated to the period 84–63 B.C.E.

The biblical reading tradition(s) was/were more conservative than the spoken languages. The transcriptions of Josephus and Aquila show that $^\partial h$ did not disappear from that/those tradition(s) until the second century C.E., although signs of its decline are already apparent in the first century C.E. The preservation of $^\partial h$, without support from spoken Hebrew and Aramaic, is an impressive achievement of the proto-Masoretes. The successful transmission of the double realization of $n$ from one generation of readers to the next must have required long periods of training. Readers had to learn the correct values of $n$ by rote, verse by verse.236 Such training was clearly impossible during the war with

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236 Contrast $^\partial$, whose realization as [s] was supported, in many words, by spoken Hebrew and Aramaic, and $^\partial$, whose emphatic pronunciation was restricted to a single word; see Steiner, “Ketico-Kere”; and idem, “Emphatic $^\partial$ in the Masoretic Pronunciation of $\tau\beta\alpha\nu$ (Dan 11:45)” (in Hebrew), in Hebrew and Arabic Studies in Honour of Joshua Blau (Tel-Aviv: Tel-Aviv University, 1993), 351–61.
Rome. It appears that when the last readers trained before the war died, the tradition died with them.

Our study of Greek transcriptions of *h provides a tool for dating Greek translations of Hebrew books. The transcriptions in 2 Esdras, the canonical Greek translation of Ezra-Nehemiah, belong to the the second century C.E., while the transcriptions in the Greek version of Judith appear to be earlier than the first century C.E.