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Title From Proto-Hebrew to Mishnaic Hebrew : the history of "-akh" and "-ah".

In Hebrew Annual Review 3 (1979) 157-174

Subject Hebrew language -- History

Hebrew language, Talmudic

Source (journal) Hebrew Annual Review. Columbus, OH

ULS Link Display ULS record for this journal

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# FROM PROTO-HEBREW TO MISHNAIC HEBREW: THE HISTORY OF 7; AND 7; 1

Bv

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אנשי בית שני אשר היו לפנינו אנשי סברא ובעלי משנה לא נסדרה משנתם ולא נאמר תלמודם כי אם על הסדר הזה אמֵך בנֵך פעלַך עונַך

". . . The men of the Second Temple who came before us, men of learning and masters of mishnah — their mishnah and talmud was always formulated in this way: אָמֶר, בנָר, פּעלָר, עונָך (Ibn Kapron, Ibn Daud, and Ibn Chiquitilla, 1870, p. 44).

ONE OF THE IMPORTANT breakthroughs in the rediscovery of Mishnaic Hebrew was the demonstration by Ben-Hayyim (1954, p. 50) that the three major reading-traditions of Hebrew — the Tiberian, the Babylonian, and the Palestinian — agree in restricting the general (i.e. non-pausal) use of the 2ms pronominal suffix  $\frac{1}{3}$ , to post-Biblical texts. This aspect of Ben-Hayyim's theory was further strengthened ten years later, when Yalon (1964, pp. 13–15) called attention to the tenth-century passage quoted above and many other interesting pieces of evidence.

1. It is a great pleasure to acknowledge the debt I owe to Professors Haim Blanc, Joshua Blau, Daniel Boyarin, Dietz Edzard, Edward Greenstein, Moshe Held, Robert Hetzron, Joseph Malone, Erica Reiner, and Malcah Yaeger for their valuable comments on an earlier, and very different, version of this article (originally prepared for the Fourth North American Conference on Afroasiatic Linguistics, March 14–15, 1976, Philadelphia) and/or their answers to questions about the issues raised here. It goes without saying that all errors in this article are my own.

Ben-Hayyim went beyond the simple observation that the use of אָן is characteristic of post-Biblical texts. He noted that אַריג and that its distribution is by no means random. In Babylonian manuscripts of post-Biblical texts, for example, the following rule, based on forms like אַביג ("your father"), יֹלְרְבוֹן ("your deeds"), and אַביג ("they will bring you near"), was shown to obtain (Ben-Hayyim 1954, p. 37):

In words ending in a vowel before the suffix, the form of the suffix is  $-\underline{k}\hat{a}$  in all places.

Conversely, bases ending in a consonant generally take 7-, even though 7- is also found (Ben-Hayyim 1954, p. 36).

In a subsequent study, Kutscher (1963, pp. 264f) showed that ק- and ק- in the Kaufmann ms. of the Mishnah obey the same rules, and, moreover, obey them more consistently than in the Babylonian mss. examined by Ben-Hayyim, the only exceptions in this ms. being בְּינָתְּךְּ ("your understanding," 'Abot, 4:14) and הַּינֶתְרָּ ("it has reached you, it's yours," 'Arakin, 8:1,3).

These findings raise several questions: What is the origin of  $\exists_{\bar{\tau}}$  in Hebrew? Why does its frequency increase so dramatically in post-Biblical texts? Why doesn't  $\exists_{\bar{\tau}}$  replace  $\exists_{\bar{\tau}}$  and בינתך and בינתך?

This article is an attempt to answer these questions plus a number of others which will arise in the course of the discussion. The questions will be dealt with in the order of their occurrence above.

#### 1. What Is the Origin of \(\bar{\gamma}\)- in Hebrew?

In answer to this question, Ben-Ḥayyim (1954, pp. 63f) laid down a general rule that "the absence of a final vowel [in this form] . . . is not a feature of original Hebrew" but rather an Aramaism. This rule, in the opinion of Ben-Hayyim (1954, p. 63, note), applies to all texts, including the Tiberian text of the Bible:

It would appear that in this detail and in others similar to it, the Tiberian tradition also followed the usual (Aramaic) pronunciation.

The main problem with this theory is that it is unable to account for the pausal distribution of  $\eta_{\tau}$  in Masoretic Hebrew. This pausal distribution is not peculiar to the Tiberian tradition. In Geniza fragments with Palestinian vocalization (Kahle, 1930, pp. 87, 79), we find:

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לר (Ps 71:23, major disj.) vs. לֹד (Ps 71:22, conj.)
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לר (Jer 1:19, major disj.) vs. אתר (ibid., conj.).

In Babylonian fragments (Kahle, 1913, pp. 4, 24, 58f), the picture is the same:

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לך (Exod 13:11, major disj.) vs. אָל (ibid., minor disj.)
עמר (1 Sam 10:7, major disj.) vs. לֹד (ibid., minor disj.)
קל (Job 40:9, major disj.) and
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עמר (Job 40:15, major disi.) vs. אָר (Job 40:14, minor disi.)

It is difficult to understand why an Aramaism would be almost entirely restricted to pausal position in all three traditions.

Finally, it should be noted that  $\frac{1}{2}$  is, from a diachronic point of view at least, an apocopated form.<sup>2</sup> and that apocope is attested as a pausal phenomenon in both Semitic and non-Semitic languages. The clearest example in Semitic is, of course, the pausal apocope rule of Arabic, which affects nouns (e.g. al-waladu ["the boy"]  $\rightarrow$  pausal al-walad) and verbs (e.g. kataba ["he wrote"]  $\rightarrow$ pausal katab) as well as pronouns (e.g. laka ["to you"]  $\rightarrow$  pausal lak).

Pausal apocope is also found, as an optional rule affecting voiceless vowels, in Cushitic — specifically in Oromo (formerly called Galla). Andrzejewski (1957, p. 364 note) reports that it is accompanied there by another phenomenon:

When a vowel-coloured breath<sup>4</sup> is omitted, in an optional variant before a pause, the lips assume the same position at the end of the word as during the articulation of the 'omitted' vowel-coloured breath.

This description is strikingly similar to Sibawaihi's description (1889, p. 309) of the Arabic pausal phenomenon<sup>5</sup> known as 'išmām:

['Išmām] occurs only in the nominative case and the indicative mood, because u comes from  $w^6$  and you are able to put your tongue in any place of

- 2. Bauer and Leander (1922, p. 255) derive אל from \*lâ-ka and אונה from \*hōn-a-ka (cf. also Harris, 1941, p. 145). These reconstructed forms are quite similar to the actually attested אַתְּכָה (Exod 29:35). That Ben-Hayyim also takes  $\eta_{-}$  as an apocopated form is clear from his use of the phrase 'illum hattanu'a hassopit ("deletion of the final vowel") to describe this form in Ben-Hayyim (1972, p. 82), the Hebrew version of Ben-Hayyim (1954). In the latter, a more noncommittal expression ("the absence of a final vowel") is used.
  - 3. For a full discussion and further references, cf. Birkeland (1940).
  - 4. I. e., a voiceless vowel.
- 5. Another pausal phenomenon reported by Sibawaihi (1889, pp. 302-306) is the so-called hā'u s-sakt ("h of silence") or hā'u l-waqf ("pausal h") which Schaade (1911, pp. 61f) interprets (in my opinion correctly) as a kind of aspirated voiceless trailoff ("gehauchte Vokal-Absatz"). An exact parallel is found in Chontal-Mayan, an American Indian language, which, according to Greenberg (1969, p. 158) has vowels with a lightly aspirated final segment in utterance-final position.
- 6. I.e., both u (the nominative case marker in nouns and adjectives and the indicative mood marker in verbs) and w (the consonant which would be produced if 'išmām were accompanied by voicing) are produced by rounding the lips.

articulation which you desire and then round your lips, since rounding your lips is like moving part of your body. And 'išmām in the nominative case and the indicative mood is for the sight, not for the ear. Do you not see that when you say hāḍā ma'n ("this is a figurative expression") with 'išmām, it is the same for the blind man as when you do not add 'išmām?

Much less clear is the relationship between apocope and pause in Akkadian. Von Soden (1969, §42h) identifies the Old Babylonian apocopated plural pronominal suffixes -kun, -kin, -šun, and -šin as verse-final forms of the hymnalepic dialect, but -kun and -kin are not even attested in that dialect (Gregoire-Groneberg 1971, p. 144), and -sun is by no means restricted to verse-final position there, as Von Soden himself makes clear in an earlier article (1931, p. 189). In fact, in the Old Babylonian hymn to Ishtar published by Thureau-Dangin (1925) — a text which contains over ¾ of the known occurrences of hymnal-epic-sun — the latter form occurs only twice in verse-final position vs. five times elsewhere (Von Soden 1931, p. 189). This distribution lends no support to the theory that -sun has an affinity for verse-final position, particularly since it is virtually identical to the distribution that one would expect if -šun totally lacked such an affinity, namely 1.5 occurrences verse-finally vs. 5.5 elsewhere.8 Hecker's claim (1968, §45a) that the apocopated forms of Old Assyrian are found mainly in sentence-final position appears to be equally devoid of solid statistical support.

So far, I have presented only isolated examples of pausal apocope, and one could hardly conclude from these that apocope is more common in pause than in context; but there are other grounds, both empirical and theoretical, for supposing that this is in fact the case.

On the theoretical plane, we might recall that apocope is, in essence, an anticipation of (i.e., a total assimilation to) a following silence (Anttila 1972, p. 72), and that silence is more common in pause than in context. On the empirical plane, we can point to one of Greenberg's conclusions (1969, p. 165) concerning voiceless vowels:

- 7. I.e., rounding the lips is just as independent of tongue position as any other bodily movement.
- 8. In verse-final position, there are two occurrences of -šun and one of -šunu (aš-ba-as-su-nu at the end of line 34, a form which Prof. M. Held assures me is a counterexample to Von Soden's claim [1931, pp. 188, 189] that only the apocopated form occurs in this position), making a total of three; elsewhere, there are six occurrences of -šunu and five of -šun, making a total of eleven. The expected number of occurrences of -šun in any given position (assuming a total lack of affinity for verse-final position) is simply half of the total number of occurrences of -šun/-šunu for that position, namely 1.5 verse-finally and 5.5 elsewhere. If we keep in mind that the actual occurrences must be integers, we see that the fit between the observed and the expected distributions of -šun is as perfect as it can be. The same is true of -šunu.

If a language does not regularly have high stress on the word-final syllabics, then, if it has voiceless vowels . . . in word final, then [it has them] in the final of some longer unit or units such as intonational contour, sentence, or utterance.

The importance of this conclusion for my study derives from the fact that the conditions for voicelessness in vowels are quite similar to the conditions for vowel deletion, a similarity which led Greenberg (1969, p. 172) to hypothesize that "in many historical instances of loss of vowels, there was, in fact, a period of voicelessness which could not find expression in the orthography." This is quite similar to a somewhat earlier suggestion of Garbell's (1958, p. 309) that "the elision of final vowels in [Arabic] pausal forms was possibly due to the tendency to unvoice them in this position."

### 2. Why Does the Frequency of \(\bar{\pi}\)- Increase So Dramatically in Post-Biblical Texts?

Ben-Hayyim (1954, pp. 51-61) argued convincingly that the increased use of  $\pi_{\tau}$  in post-Biblical texts is due to Aramaic. Kutscher (1963, pp. 261f) accepted this explanation and even strengthened it by pointing to feminine  $\pi_{\tau}$  in post-Biblical texts, a form which is not found in the Bible at all, and whose use after the prepositions -2 and -7 is more reminiscent of Aramaic  $\pi_{\tau}$  than of Biblical Hebrew  $\pi_{\tau}$ . But Kutscher modified Ben-Hayyim's explanation in a subtle way. For Ben-Hayyim (1954, pp. 59-61), Aramaic influence is a synchronic factor distinguishing reading styles of a dead language, the Biblical reading style being less contaminated by Aramaic than the post-Biblical reading style. For Kutscher (1972a, p. 282), on the other hand, Aramaic influence was a diachronic factor distinguishing different periods of a living language, Biblical Hebrew (BH) being less influenced by Aramaic than Mishnaic Hebrew (MH) is.

There is probably an element of truth in both of these approaches. Ben-Hayyim's approach is almost certainly valid for Greek and Latin transcriptions (1954, pp. 25, 52f) like ηναχ ("your eyes"), οιβαχ ("your enemies"), αλαχ ("on you"), dabarach ("your words"), alichotach ("your goings"), and probably also for Palestinian forms (1954, pp. 30, 56f) like פּפּר"), מעריעוֹר ("and your [masc.] eyes"), "עריעוֹר ("they will regard you [masc.] with awe"), and Samaritan forms (1954, pp. 38, 56f) like banek ("your [masc.] sons"), and yabbadok ("they will serve you [masc.]"). On the other hand, there is no reason to doubt that the more restricted distribution of ¬, in the Kaufmann ms. (and other good vocalized mss. of the Mishnah) reflects colloquial Hebrew usage of the tannaitic period, particularly since this distribution differs significantly from the distribution of ¬, in Aramaic, as shown in the following chart:

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אבוד (Kutscher 1963, pp. 264f) אָבוּד (''your father'') אָבוּד (''your father'') אָבוּד Dan 5:11 אָבוּד (''may they alarm you'') בְּקַרִיבוּד Dan 5:10 עַבְדָיד (''your servants'') אָבִיד Targum בּילידתר (''she bore you'') הָליּצַתְּכָה
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The explanation offered for these differences below (Questions 3 and 4) will hopefully strengthen the view that the increase in the use of  $\eta_{\tau}$  must be dated to a time when Hebrew was still a living language — a mixed language to be sure, but nevertheless a living one.<sup>9</sup>

It should also be pointed out that Aramaic influence may not have been the only cause of the increase in the frequency of קָּ in MH. Since קַּ was a pausal form in BH, a second factor may have been the tendency of BH pausal forms (e.g. פָּלִי, פָּלִי, הַּלְּדֶשׁׁ, יִּפִיּ, בָּלִי, פָּלִי, פָּלִי

#### 3. Why Doesn't Transplace T- after Bases Ending in a Vowel?

This is a question which was raised, but not answered, by Kutscher (1963, p. 265):

9. On the other hand, the evidence for Aramaic influence adduced by Ben-Hayyim and Kutscher makes it difficult to accept the suggestion of Bauer and Leander (1922, p. 30) that the development in question had already taken place during the Biblical period, in a dialect different from the one which formed the basis of the Masoretic vocalization. It is true that, as Kutscher (1972b, pp. 1597, 1599) has pointed out, MH has several features (i.e., in["this"], \vec{v}["which, that''], ከነቯ [''she was'']) which are more archaic than the corresponding features of standard BH (i.e., אַשֶּׁר, זֹאַת, ) and which therefore must stem from a dialect different from the latter. It is also true that two of these features (i.e., זו and -ש") and two others (i.e., איכה > איכה > איכה ["where"] and הְשְׁתְּחָנֵיִם ["prostration"]) are among the dozen or so non-standard Biblical features identified as northern by Burney (1903, pp. 208f) and Driver (1956, p. 188). And, finally, it is true that northern Hebrew may have been more heavily influenced by Aramaic than standard BH was (cf. אֵיכֹה and הַשְּׁמָתְנִיה discussed immediately above, and the name ייסוד ("our lord is Yo''] found in Samaria ostracon xhi; cf. also Driver 1956, p. 449). Nevertheless, Aramaic influence on the Hebrew pronominal system presupposes a degree of intimacy between the two languages which is difficult to imagine in pre-exilic Israel, and which is certainly not attested in our Biblical or extra-Biblical sources of northern Hebrew. Nor do these sources offer any direct support to the notion that MH  $\frac{\pi}{2}$  and  $\frac{\pi}{2}$  go back to northern Hebrew. The Elisha cycle, our most important Biblical source, has הכה (2 Kgs 7:2) and כ- (2 Kgs 4:2,7) in environments where MH requires קר

10. Strangely enough, I have not been able to find one discussion of MH which treats nominal forms like הוקדשו (''implement, vessel'') and יפי (''they said''), although Bendavid (1971, pp. 438f) comes close to doing so.

Why did the Biblical form survive in the above mentioned instances . . .? At present, no plausible solution is to be found.

I submit that the answer to this question is simple, once it is recognized that the distribution of אָרָ vs. אָר in MH follows the same rule as the distribution of אָרָ vs. אָר in BH and MH. (Note the rhyme!) I submit, in other words, that analogical forces limited the borrowing of Aramaic אָר (or the spread of pausal אָר ) to positions where אַר was already present. Thus, אַר changed to אָרָה on the analogy of אָרָה, but אָרָי remained on the analogy of אָרָי changed to אָרָי, on the analogy of יָדֶי, but אָרָי, that it is remained on the analogy of יָדָי, and so on. Note that the analogy which I am positing was a two-edged sword, which blocked the spread of אָר in some environments, but encouraged it in others. We thus have a third factor responsible for the rise in frequency of אָר in MH, and the answer to Question 2 given above should be modified accordingly.

#### 4. Why Doesn't אַ: Replace אַ- in the Words בּינַתְּדּ and הְּיִיטָתְבָה ?

The form הְלְיֹאָרְהָה (''it has reached you, it's yours'') occurs twice in the Kaufmann ms., once in 'Arakin, 8:1 and a second time in 8:3. Both times, the scribe of the originally unvocalized text, or one of his predecessors, made a special effort to ensure that the pronominal suffix would be read correctly, by writing it with a a at the end. Judging from the data collected by Kutscher and the dozens of examples which I have checked, it is quite possible that these are the only two instances of this spelling of the 2ms pronominal suffix in the entire ms. By employing this spelling here and, to my knowledge, only here, the scribe showed both his awareness of the anomalousness of a MH form with after a consonant, and his confidence in its correctness. One might also note that Codex Parma A (= De Rossi 138) has the same spelling for the two occurrences of this word, that an ancestor of Codex Paris had the same spelling for the first of the two occurrences, and that the vocalizer of Codex Kaufmann, who often disagrees with the original scribe, agrees with him in this case.

I propose to solve this problem by pointing once again to the distribution of  $\eta$ - and  $\eta$  in BH. Strangely enough, it is the former variant which is used with 3fs verbs in the perfect in BH, 12 e.g., אַרָּוּתָה ("it seized her"), שַׁבְּלֶּתָה ("it

<sup>11.</sup> Codex Paris itself has the nonsensical reading הגעת כה.

<sup>12.</sup> According to Codex Parma A (=De Rossi 138), the same phenomenon is found in MH: פְּדְיִשְׁהַ ("she redeemed it"; Halla 3:3). In Codex Kaufmann, however, these forms are vocalized with a מפיק a in the ה but also with a שה in the ה. (Mixed forms of this type are also found in Babylonian Hebrew; cf. Yeivin, 1973b, p. 90, for examples.) If such forms were really used in the Mishnaic period, the analogy between אַרָּאָ־, and אַרָּאָיָ which I am positing would have to be dated earlier than the time they came into use.

bereaved it''), בְּעַסְתָּה ("she angered her"). In all of these forms, the ending  $-\pi$  is synchronically equivalent to the anomalous form  $-\pi$ . Later in this article (Question 5), I will attempt to explain the origin of this anomalous form, but for now the important point is that it exhibits the same anomaly as once again we see that analogical forces limited the borrowing of Aramaic  $-\pi$  (or the spread of pausal  $-\pi$ ) to positions in which  $-\pi$  was already present.

In the preceding discussion, I attempted to explain the distributions of  $\mathbb{T}_{7}$  and  $\mathbb{T}_{7}$  in MH by equating them with the distributions of  $\mathbb{T}_{7}$  and  $\mathbb{T}_{7}$  in BH and (at least in part) MH. It is obvious, however, that in so doing, I merely postponed the inevitable confrontation with the real problems. These problems remain essentially the same, even though they must now be formulated in terms of  $\mathbb{T}_{7}$  and  $\mathbb{T}_{7}$  rather than  $\mathbb{T}_{7}$  and  $\mathbb{T}_{7}$ . I will now take up one of these problems.

## 5. Why Should the 3fs Verb in the Perfect Be an Exception to the Rule that Bases Ending in a Consonant Take 77. Rather than 77.?

This is a problem which was already noted by the medieval grammarians. Ibn Janāh (1886, p. 375) writes that the ה of הַּאָחָהָה, אַקּוֹהָה, שִּכְּלָתָה, אַקּוֹתָה, פּנִעסְהָה, שֹּכְּלָתָה, אַקּוֹתָה, אַקּוֹתָה, פּנִיסְהָה, פּנִיסְהָה, פּנִיסְהָה, יְּאַרְּוֹלְיִנְה עִלִּי גִּיִר אַלְעָאִדה (''silent in defiance of custom''). In another place (1886, p. 196) he says, אלמהור פאסתתקל דלך (''the norm for this was to be pronounced, but then it became burdensome for them''). David Qimhi (1842, p. 29a) states the problem somewhat more explicitly in discussing the hypothetical form אַקְּבְוַרָּה.

כלו קמוץ והה''א במפיק כן הוא על המשפט אלא שמצאנוהו במשקל פְּקַדַּתְּה הלמ''ד פתוחה והתי''ו דגושה והה''א רפה.

It is vocalized entirely with קמץ and a מפיק in the ה. This is how, by rights, it should have been, but [in fact] we find it on the pattern of שתח with a שתח under the 3rd radical, a דגש in the ח, and a silent ה.

13. It is strange, therefore, that Kutscher considered בְּיֶבֶתְּדּ to be an exception. Perhaps this judgement is based on the fact that the rest of R. Nehoray's maxim is in Mishnaic Hebrew.

Adding to our bewilderment is the fact that the 3fs perfect does not exhibit any exceptional behavior in the other Semitic languages in which bases ending in a consonant select a different pronominal allomorph than bases ending in a vowel. Many modern Arabic dialects, for example, have two allomorphs for the 2fs pronominal suffix: -ki after vowels (e.g., Damascene<sup>14</sup> and Jewish Baghdadi<sup>15</sup> abūki ["your father"]; D. 'alēki = J. B. 'lēki ["on you"]; D. axadūki = J. B. əxðōki["they took you"]) and -ek/-ək<sup>16</sup> after consonants (e.g., D. bētek = J. B. bētək ["your house"]; D. axadek = J. B. axaðək ["he took you"]). In these dialects, the 3fs perfect selects -ek/-ək just like any other base ending in a consonant (e.g., D. axadtek = J. B. axðətək ["she took you"]; D. šāftek = J. B. šafətək ["she saw you"]; D. la'ītek = J. B. laqətək ["she found you"]).

Similarly, in the Aramaic of Targum Ongelos, 17 we find two allomorphs of the 2fs and 3fs pronominal suffixes: אַרָּ and אַרַ after consonants (e.g., Gen 16: רְבוֹנְתִיהְ [''your mistress'']; אַמְתִיּךְ [''your mistress'']; אַמְתִּיךְ [''her mistress'']; ייִבוֹנְתֹּה [''her maidservant''] אַשְׁכְּחֹה [''her maidservant''] אַשְׁכְּחֹה [''her maidservant''] אַמְתֹּה [''her maidservant''] אַמְתֹּה (''your eyes'']; יבְּנִבְּי [''your sons'']; יבְּנַבְּי [''her eyes'']; יבְּנַבְּי [''her hands'']; Gen 19:33, אַבּנַבְּי [''her father'']). To the extent that the relevant forms are attested, 18 we may state that, here too, the 3fs perfect does not behave differently from any other base ending in a consonant: עִּנִיתָּה (''she afflicted her''; Gen 16:6), אַנִיתָּה (''she covered it''; Exod 2:3), שׁנִיתָּה (''she put it''; Exod 2:3) עוֹיתַה (''she took it''; Exod 2:5). Why then does the Hebrew 3fs perfect base -שִׁלְּה (unlike the Hebrew nominal base -שִׁלְּה behave as though it ended in a vowel?

I contend that this anomaly, like many other synchronic anomalies, has a simple diachronic explanation. I contend, in other words, that there was an earlier stage of Hebrew in which forms like anomalous at all.

To prove this, we need only take the Masoretic forms which end in a consonant and compare them with their Arabic cognates. The overwhelming

- 14. The examples from this dialect are taken from Cantineau (1937, pp. 154f).
- 15. The examples from this dialect are taken from Mansour (1974, pp. 103f, 158f), except for the 3fs perfect verbs which were provided by Mrs. Munira Daniel and Prof. Haim Blanc.
- 16. The latter is the Jewish Baghdadi form given by Mansour (1974, p. 107). Blanc (1964, p. 65) gives it as -k, adding  $\theta$  by means of a phonological rule of anaptyxis.
- 17. In Targum Yonatan, on the other hand, the allomorph בי-is rare (and possibly limited to the Former Prophets), having been largely replaced by ד-. Thus, Dalman's assertion (1905, p. 15) that ''der Wortvorrat beide Targume ist zwar verschieden, ihre Grammatik aber ist die gleiche'' is not strictly accurate.
  - 18. I have been unable to find a 3fs perfect with a 2fs suffix in Onkelos.
- 19. Note that this nominal base, like the 3fs perfect base, alternates with קשלה. This fact alone should forestall any attempt to answer Question 5 by pointing out that the 3fs perfect base has an allomorph which ends in a vowel.

majority of these cognates end not in a consonant but in a short vowel—generally a mood ending or case ending.<sup>20</sup> Of the handful of cognates which do end in a consonant, one stands out: the 3fs perfect (qatalat). We conclude, therefore, that the difference in pronoun allomorph selection between the 3fs perfect base and most other Masoretic bases ending in a consonant is the reflex of an older difference between them in type of final segment (consonant vs. vowel). More specifically: only bases which ended in a short vowel in Proto-Hebrew select the allomorph  $\exists_z$  in Masoretic Hebrew.

Another synchronically anomalous form which may have a similar explanation is the suffix  $\frac{1}{2}$ . Although this form is not actually attested (any more than  $\frac{1}{2}$ , is), the existence of  $\frac{1}{2}$ , coupled with the existence of rare forms like  $\frac{1}{2}$ .

20. 1 follow Brockelmann (1908, pp. 108, 475ff) and Harris (1939, pp. 41f) in positing case endings for singular nouns in the construct state (including nouns with pronominal suffixes) in Proto-Semitic and early Proto-Hebrew. The theory of Ungnad (1906, pp. 174ff) and Bauer and Leander (1922, p. 523) that singular nouns in the construct state had no case marking at all in either of these two periods is untenable in light of the full case-marking attested for the construct in Arabic, Ugaritic, and (Hetzron, 1969, p. 117) Proto-Ethiopic, and the partial case-marking attested in Akkadian and (Krahmalkov, 1970 and 1972) Phoenician. Moreover, the alternation between absolute \*C VC VC and construct \*C VCC in a few Hebrew nouns (אֶלֶע'עֶלֶע [''rib''], קהַר/בָּהָר, [''shoulder''], אָשֶׁד/אַשֶׁד [''thigh''], שָּׁעֶר/שֹּעֶר [''hair''], גַּדר/גַדר ('wall''], אַשֶּׁד/אַשֶּׁד ["slope"], אָשֶׁן/עָשֶׁן "smoke"], שֶׁכֶר/שֶׁכֶר ["wages"]) and adjectives (הבד/בָּבַד") ("heavy"], עֵהֵל/עֵרֵל ("uncircumscised"), אֶרֶהּ/אֱרוֹּ ("long"]) and the existence of feminine construct forms ending in \*-CVCt (e.g. ממלכת ["kingdom of"], מרכבת ["chariot of"], ממלכת ["family of"], מַמֶּרֵת ["crown of"]) are surely products of a very early syncope rule affecting construct forms. Since syncope typically affects only vowels in an open syllable, it follows that the syncopated construct forms given above must have ended in a vowel. Even Bauer and Leander (1922, p. 552) admit that this latter conclusion is correct, and they are, therefore, forced to assume that the syncopated construct forms originally occurred only with the ls pronominal suffix \*-ī and then spread by analogy to all of the other suffixed and non-suffixed construct forms.

A glance at the examples given above shows that this solution is totally inadequate. Some of the examples (ארך, ערל, כבד) are adjectives and, therefore, could not have occurred with pronominal suffixes. Others (אשר, עשו) have semantic features which normally prevent them from occurring with pronominal suffixes referring to humans (including -i). And still others (ירך, כתף), while occurring freely with pronominal suffixes in the Bible, do so only in their \*C VC VC form, the \*C VCC form being restricted to non-suffixed construct forms (and vice versa).

Much more difficult to refute is the theory proposed by Diakonoff (1965, pp. 60f) and accepted by Hetzron (1969, p. 116) according to which the partial case-marking (genitive -i, nominative Ø, accusative -Ø) of Akkadian and Phoenician represents the original (Proto-Semitic) state of affairs. It should, nevertheless, be noted that even Akkadian, in its earliest stages, shows vestiges of full case-marking. In Old Assyrian, for example, the word kalum ("entirety") is declined tripototically (Hecker, 1968, §62b). This is an exception, to be sure, but it is a very significant exception from a historical point of view, since the word in question is a very common one and one which is used almost exclusively in the construct state. Since frequently used words are less susceptible to change and, thus, often preserve archaic features, it stands to reason that the triptotic declension of kalum in the construct was once the rule rather than an exception.

Equally significant is the regular (if not always correct) use of nominative and accusative case endings before apocopated pronominal suffixes in the hymnal-epic dialect of Old Babylonian (Gregoire-Groneberg, 1971, pp. 145f, corrected in Annex 2 of her article in Archiv für

(alongside  $J_{-}$ )<sup>21</sup> and  $J_{-}$  (alongside  $J_{-}$ )<sup>22</sup> suggests that  $J_{-}$  did exist, if not phonemically at least morphophonemically (i.e., as an underlying form).

This form, as stated above, is synchronically anomalous, since bases ending in a consonant are supposed to take  $\pi_{\tau}$ . Diachronically, however, the

Orientforschung 26 [to appear]; cf. also Old Akkadian mûraš (''her foal [accus.]'') in Gelb [1970, p. 10] and Westenholz [1977, p. 201] — references which I owe to Professors Edward Greenstein and Dietz Edzard). The significance of this usage rests on the well-known tendency of poetry to make use of archaic forms.

The tendency of proper nouns to preserve archaic forms is no less well-known, and it is, therefore, noteworthy that even the nominative ending is used before pronominal suffixes (apocopated or unapocopated) in Old Akkadian and early Old Babylonian names, e.g., Nidnuša ('her gift'), Iqpuša ('her embrace [?]'), Kaspuša ('her silver''), Silluš-Dagān ('his shadow is Dagān''), Rigmuš-dan ('his roar is mighty''), and Rīmuš ('his gift'') (Edzard, 1974, pp. 291f). Edzard (1974, p. 292) shares my belief that these forms are the remnant of an original triptotic declension.

- 21. The widespread belief that  $\mathfrak{I}_{\overline{a},\overline{b}}$  and  $\mathfrak{I}_{\overline{b},\overline{b}}$  are merely variants of each other is challenged by Hetzron (1969, p. 107) on the following grounds:
  - (a) The former, just like the energic in general, is rare, while the latter is very common.
  - (b) The former shows a definite preference for pausal positions, while the latter does not.
  - (c) The former has an energic connotation, while the latter does not.
  - (d) The former may occur after a verb in any person, while the latter is used only after 1s, 2ms, 3ms, 3fs, and 1p.

If these arguments prove to be correct, I shall obviously have to delete my discussion of  $\eta_{2,5}$ , since the grounds for positing this form will have disappeared. In the meantime, however, the following counter-arguments may be offered to justify the position taken in this article:

- (a) The assertion that the energic is rare is based on the assumption, not shared by the majority of scholars, that  $J_n$  is not an energic form.
- (b) The preference of אָרָהּוֹי for pausal position is only part of a larger picture. It is paralleled by the preference, pointed out by Blau (1974, p. 23) of אַקָּהּוֹּ for pausal position. Of the eight cases of אַקָּהּוֹּ collected by Ibn Janah (1886, p. 196), five stand at the end of a verse or at an אַקּהּוּ; by contrast, none of Ibn Janah's three examples of אַקְּהָּ stands in one of these positions. Despite this difference in distribution, אַקְּהָּ and אַקַּ are clearly related. A very similar phenomenon is pointed out and explained by Joüon (1923, p. 81):

Le ralentissement qui précède la pause explique que dans certains cas on préfère, en pause, des formes plus longues. Ainsi, dans les verbes מ״ן souvent, en pause, on omet l'assimilation du d, par ex. ינצרוּ.

- (c) The impression that אַבְּ possesses an energic connotation may be due to the rarity of the form and, above all, to its preference for pausal position, which is by nature emphatic. In any case, this connotation of אַבָּ is too nebulous to distinguish it from אַבָּ.
- (d) The assertion that אַן- may occur after a verb in any person is based on the assumption, not shared by the majority of scholars (as Hetzron himself mentions) and not easy to square with the prohibition of long vowels in closed syllables in Proto-Hebrew (see below), that the lof אַרָּבְּרְבָּוֹה (''they pass it''; Jer 5:22) is the nun energicum rather than the nun paragogicum. It is true that, as Hetzron points out (personal communication), in a synchronic grammar of BH there may be no grounds for distinguishing these two nun's; however, the issue which concerns us here is a diachronic one, and it is, 'herefore, valid to eliminate from our discussion cases of אָן which are reflexes of the nun paragogicum.
- 22. Here too, Hetzron (1969, p. 125) rejects the commonly-held belief that both variants are

energic suffix ፲-/፲= is one of the handful of Hebrew forms which ended in a consonant in Proto-Hebrew as well as Masoretic Hebrew. This is shown not only by the Arabic cognate  $-an^{23}$  and the highly unusual dage in the ፲ of "if would tear you off"; Jer 22:24), but also by the assimilation \*- $anha^{24} > \pi_{2}$ -/፲= $\pi_{2}$ -, whose unusual progressive direction (paralleled only by \*- $atha^{24} > \pi_{2}$ - and \*- $athu > \pi_{2}$ ) seems to mark it as an early sound change. If so, we have a good diachronic reason for the failure of the energic suffix to take  $\pi_{2}$ : Only forms which ended in a short vowel in Proto-Hebrew select the allomorph  $\pi_{2}$  in Masoretic Hebrew.

My theory is less successful in accounting for the form ימצאונה ("they will find her"; Jer 2:24), attested with  $\pi$ - rather than  $\pi$  in a fragment with Palestinian vocalization as well (Yeivin 1973a, p. 66). It is unlikely that the 1 in this form was vowelless in Proto-Hebrew, as my theory would predict, since that language, before the loss of case-endings and mood-endings, was just as strict as Arabic in prohibiting long vowels in closed syllables (cf. ממנת ["she will die''] <\*tamūtu, but חַמֹּה [''may she die''] < \*tamut; יַקִים [''he will establish''] < \*yaqimu, but קשובינה [''may he establish''] < \*yaqim; משובינה [''they will return''], but אָשׁמּרֶת < \*tatubna; אָשׁמּרֶה (''watch''], but אָשׁמּרֶת (''watch of''] < \*'ašmurt or \*'atmurt; גבירה [''queen, queen-mother''], but גברת ["queen, mistress"] < \*gibirt or \*gubirt). There seems to be no escape from the conclusion that the lof ימצאונה did have a vowel originally. In other words, I am forced to conclude that this 1 is, at least historically, the nun paragogicum (as in Arabic yaqtulunaha ["they kill us"] and Amarna Canaanite timitunanu<sup>26</sup> ["you make us die"]) rather than the nun energicum, and that it was followed by a short a in Proto-Hebrew. Still, it is strange that Masoretic Hebrew, which

energic. He argues that the gemination in  $\mathfrak{J}_{\mathbb{Z}}$  is not to be derived from the old *nun energicum*, because the latter was used only with the imperfect of the verb, while the former occurs also with perfects as well as an occasional infinitive, participle, and adverb (unless  $\mathfrak{I}_{\mathbb{Z}}$  [''enough''] is also a participle). Instead, he argues, the gemination in  $\mathfrak{I}_{\mathbb{Z}}$  should be viewed as a product of its pausal paroxytone accent. Unfortunately, he does not adduce any parallels to support this latter claim. And in light of his belief that the BH energic shows a decided preference for pausal position, it is a bit strange that he should stress the pausal distribution of  $\mathfrak{I}_{\mathbb{Z}}$  as much as he does and yet, at the same time, reject any connection between it and the energic.

<sup>23.</sup> It is true that Arabic -an has a longer variant -anna which does end in a vowel, but the gemination in the latter shows that it is not the latter which is cognate with BH 3.

<sup>24.</sup> For the short a of the 3fs pronominal suffix, see note 27 below.

<sup>25.</sup> Blau (1974, p. 23) is also of the opinion that this change is early.

<sup>26.</sup> Letter 238, line 33.

<sup>27.</sup> The vowel is given here as short, because I do not share the widespread belief that final vowels had to be long or anceps in order to escape deletion. I believe that short \*a, unlike short \*i and \*u, was frequently preserved in word-final position because of its greater sonority.

preserves final a²¹ in הָלֶּהְ, מְּלֶּלְּהְ (''they/you [fpl] will kill''), הַּנָּה (''they [f]''), אֲתְּבָּה (''you [fpl]''), אֲתָּבּ (''you [ms]'') אֲתָּבְּ (''you [ms] killed''), אַתְּבּ (''let me kill''), and other forms, should not have preserved even a trace of this a. One would expect to find at least a few cases of תְּלְּבָּנְה (''you [mpl] will kill'') in the Bible. It is also strange that ק- does not have a pausal form ק- after this nun paragogicum (cf. Ps 63:4 יְשַׁבְּחִנְּבָּר (''they will praise you''] and Ps 91:12 יְשַׁאִּרְּבָּר (''they will carry you'']).

The above exception, however intractable it may seem, should not be

This hypothesis concerning \*a in word-final position is supported by the exceptional stability of \*a in other positions. Joüon (1923, pp. 75f) gives the following rule:

Dans les mots disyllabes milera $^i$  . . . si la seconde voyelle est longue, la première voyelle primitivement a demeure, les primitives i, u tombent.

This rule, in spite of numerous exceptions, is a sound one. It enables us to account for such pairs as (''inhabited'') - נוֹשְׁבוֹת\* (''they blow''), וֹשְׁבוֹת (''his seal'') - אַהָרּ (''he who seals it''), הָבֹּר (''give'') - לָבוּשׁ (''idressed''), לֶבוּשׁ (''clothing'').

Evidence that a is more resistant to reduction and deletion than the high vowels are is by no means limited to Hebrew, as Malone (1971, p. 62, note) has pointed out independently. In the Arabic dialects, final \*a was generally preserved longer than final \*i and \*u (Blau 1977, pp. 15f). And to this day, there are many dialects (called "parlers différentiels" by Cantineau) which retain \*a (or some reflex of it) in environments where \*i and \*u have totally disappeared (Blau 1977, p. 16, note). According to Rabin (1951, p. 97), a similar situation existed already in Ancient East Arabian dialects, and according to Schaade (1911, p. 57), even classical Arabic phonology reflects the resistance of a to deletion.

In Ethiopian Semitic, \*u and \*i are reduced to  $\mathfrak o$  or  $\mathfrak o$ , while \*a is preserved, even in word-final position. And in Syriac, the plosive realization of בגדכפת is restored more regularly after  $\mathfrak o < *i$  than after  $\mathfrak o < *a$  (e.g. אַבְּדֶב < \*garab [''leprosy''] but אַבְּדֶב < \*garib [''leprous'']; Nöldeke 1904a, p. 17), a difference which would seem to indicate that \*a was deleted later.

As noted in part already by Nöldeke (1904b, p. 3, note), the history of French provides a very striking parallel to these Semitic phenomena. According to Fox and Wood (1968, p. 29):

Final atonic vowels were slurred . . . in Gallo-Romance, apart from a, the most sonorous vowel sound, though it was weakened in that period to the neutral  $\mathfrak d$  and disappeared from pronunciation in the 17th century (except in poetry), hence the difference between masculine and feminine adjectives, e.g. las < lassum but lasse < lassam, etc.

In conclusion, I may add Greenberg's discovery (1969, pp. 162f) that a is more resistant to devoicing than i and u. As mentioned above, the conditions for voicelessness in vowels are quite similar to the conditions for vowel deletion.

28. This form has the very same \*-na suffix that allegedly existed in the masculine plural. Even if \*-na had an anceps vowel (and I fail to see the necessity for such vowels in Proto-Hebrew, as explained in the preceding footnote), there is no reason why it should have been subject to apocope in the masculine plural but not in the feminine plural. On the contrary, analogical pressure should have ensured parallel treatment.

allowed to distract us from the overall picture, which is summarized in the following chart (:=length):

The phonemic shape of the Proto-Hebrew pronominal suffix in the last line requires a word of explanation. Ordinarily, one would reconstruct the etymon of  $\pi_{\bar{\tau}}$  as \*-ah, but this is impossible here, since Proto-Hebrew did not allow hiatus. Instead, I reconstruct the etymon of  $\pi_{\bar{\tau}}$  as \*-h, and derive its  $\gamma \pi_{\bar{\tau}}$  from the short base-final vowel to which \*-h was attached in Proto-Hebrew. This short vowel was protected from apocope by the suffixed pronoun, but since it was deleted elsewhere, it was a prime candidate for metanalysis. Thus, in the course of time, this short vowel took on the fixed value a before the 3fs pronominal suffix — that being the vowel of \*-ha^{29} as well as the statistically most frequent vowel before pronominal suffixes (thanks to the high frequency of prepositions ending in a, especially the etyma of  $-\frac{\pi}{2}$ ,  $-\frac{1}{2}$ , and  $-\frac{\pi}{2}$ ) and was incorporated into the suffix, yielding \*-ah >  $\pi_{\bar{\tau}}$ .

Getting back to the older form \*-h, there can be little doubt that it is merely an apocopated variant of \*-ha. This brings us to the last question.

### 6. Why Is the Apocopated Allomorph of the Proto-Hebrew 3fs Pronominal Suffix Found Only after Bases Ending in a Short Vowel?

Cantineau (1937, pp. 148ff) answered this question (and similar questions about Aramaic and colloquial Arabic suffixes, some of which have been discussed above) by positing a rule of *quantitative* vowel harmony in Proto-Semitic, according to which the length of the vowel in a monosyllabic pronominal suffix is determined by the length of the base-final vowel. After a short base-final vowel, then, the a of the 3fs pronominal suffix was short and, hence,

<sup>29.</sup> See note 27 above.

<sup>30.</sup> That the etyma of these prepositions ended in a is shown by forms like מָּחֶם (''in them''), לָהֶם (''to them''), לְּלָיִם (''to them''), לְלָיִם (''to them''), לְלָיִם (''to them''), לַּלְיִם (''to them''), אָתָה (''to you [fs]''), קּבָּר (''in you [fs]''), אֹתָר (''you [fs]''), instead of the expected אָרָ, בְּרָּ אָתָר , אַתָּר , אַתְּר , אַתְּר , אַתָּר , אַתְּר , אַתְר , אַתְּר , אַתְר , אַתְר , אַתְּר , אַתְר ,

subject to apocope; after a base-final long vowel or diphthong, the a of the 3fs pronominal suffix was long and, hence, not deletable.

This is an attractive theory, but it deals with only two out of three possible environments. In its present form, therefore, it fails to explain why the apocopated allomorph is not found after bases ending in a consonant in Proto-Hebrew. Whether the theory can be modified to deal with this problem is an open question.

As an alternative to Cantineau's theory, I suggest that apocope was blocked in cases where it would have created an impermissible cluster, i.e., two consonants at the end of a syllable (CVCh) or vowel length plus consonant at the end of a syllable (CV:h). We have already seen that Proto-Hebrew has a phonological rule of vowel shortening or length deletion which eliminated the latter type of cluster when it arose through morphological processes, e.g., suffixation.<sup>31</sup> Now I am positing a constraint which prevented some of those clusters from arising in the first place.

More generally, I am positing for Proto-Hebrew the kind of teleological cooperation between seemingly distinct processes and limitations on processes which modern linguists call a "conspiracy." Conspiracies whose "negative targets" are syllable-final CC and :C clusters are, of course, exceedingly common in the Semitic languages, and they have been known for a very long time. 3 Some of these conspiracies (e.g. that of Akkadian 4) feature limitations

- 31. Another synchronic device for eliminating clusters created by suffixation in hollow and geminate verbs is the insertion of a linking vowel: מוֹל מוֹל in the imperfect (e.g. "נְיִּהְ ["they will return"] מְּבֶּבְינָה ["they surround"]) and מוֹל in the perfect (e.g. "מְבְּבִינָה ["turned"] מְבַבְּינָה ["you caused to turn"], הְּכְּבִינְה ["I established"]). It is quite possible that this device goes all the way back to Proto-Semitic, since the linking vowel of the perfect has an Akkadian cognate the ā of marṣāku ("1 am sick"), marṣāta ("you are sick"), etc. However, since the Akkadian linking vowel appears even when there is no cluster to be eliminated (e.g. zikarāta ["you are a man"]), the distribution and function of its Proto-Semitic etymon are uncertain.
- 32. Cf. Kisseberth (1969 and 1970), Lakoff (1972), Kiparsky (1973), Pyle (1974), and articles by Aitschison, Lass, and Taylor in Anderson and Jones (1974, pp. 1-15, 311-352, 403-426).
- 33. In the eighth century, Sībawaihi explained at least a dozen Arabic phenomena with the help of the slogan *lā yaltaqī sākināni* ("two vowelless consonants may not meet"). Some of these phenomena involve deletion of a consonant (e.g. 1881, p. 72, 1. 10; p. 272, 1. 16; 1889, p. 105, 1. 9), of gemination (e.g. 1889, p. 446, 1. 15) or of vowel length (e.g. 1889, p. 92, 1. 10). Others involve insertion of a vowel (e.g. 1889, p. 103, 1. 20; p. 105, 1. 12; p. 298, 1. 20) or failure to delete or move a vowel (e.g. 1889, p. 162, 1. 9).
- 34. Some of the devices which Akkadian uses to eliminate clusters are discussed by Reiner (1966, pp. 52f). The restrictions on the deletion of short vowels in Akkadian (only in a non-final open syllable immediately preceded by a short vowel; cf. Goetze, 1946) are precisely those which are needed to prevent an impermissible cluster from arising.

on vowel-deletion rules which are quite similar to the one I am positing for Proto-Hebrew.

My theory, in summary, is that the two Proto-Hebrew environments in which \*-ha is found are simply those in which apocope was blocked to avoid creation of impermissible clusters. These environments were originally lumped together as an "elsewhere" environment. Later, the loss of short final vowels and the resultant metanalysis caused the environment CVC+\_\_\_\_\_ to split off from CV:+\_\_\_\_ and merge with CV+\_\_\_\_, giving  $\overline{a}_{\tau}$  and  $\overline{a}$  anomalous distributions in Masoretic Hebrew. In Mishnaic Hebrew, these anomalous distributions were extended by analogy to  $\overline{a}_{\tau}$  and  $\overline{a}_{\tau}$ , respectively. This analogy was reinforced by two other trends favoring the spread of  $\overline{a}_{\tau}$ .

#### **BIBLIOGRAPHY**

- Anderson, J. and C. Jones (eds.). 1974. Historical Linguistics II. Amsterdam.
- Andrzejewski, B. 1957. "Some Preliminary Observations on the Borana Dialect of Galla." Bulletin of the School of Oriental and African Studies 19:354-374.
- Anttila, R. 1972. An Introduction to Historical and Comparative Linguistics. New York.
- Bauer, H. and P. Leander. 1922. Historische Grammatik der hebräischen Sprache. Halle.
- Bendavid, A. 1971. Ləšon migra uləšon hakamin. Tel Aviv.
- Ben-Ḥayyim, Z. 1954. Studies in the Traditions of the Hebrew Language. Madrid-Barcelona.
- 1972. "Surat hakkinnuyim hahaburim -ka, -ta, -ha bimsoroteha šel hallašon ha'ivrit." *Qobes ma'amarim biləšon hazal*, pp. 59-92. Ed. M. Bar-Asher. Jerusalem.
- Birkeland, H. 1940. Altarabische Pausalformen. Oslo.
- Blanc, H. 1964. Communal Dialects in Baghdad. Cambridge, Mass.
- Blau, J. 1974. "Iyyunim bətorat hakkinnuyim (kolel 'et hayyiddua') biləšonot šemiyyot." *Henoch Yalon Memorial Volume*, pp. 17-45. Eds. E. Y. Kutscher *et al.* Ramat Gan.
- \_\_\_\_\_.1977. "The Beginnings of the Arabic Diglossia. A Study of the Origins of Neoarabic." Afroasiatic Linguistics 4: 175–202.
- Brockelmann, C. 1908. Grundriss der vergleichenden Grammatik der semitischen Sprachen I. Berlin.
- Burney, C. F. 1903. Notes on the Hebrew Text of the Books of Kings. Oxford.

- Cantineau, J. 1937. "Une alternance quantitative dans des pronoms suffixes sémitiques." Bulletin de la Société Linguistique de Paris 38:148-164.
- Dalman, G. 1905. Grammatik des jüdisch-palästinischen Aramäisch. Leipzig.
- Diakonoff, I. M. 1965. Semito-Hamitic Languages. Moscow.
- Driver, S. R. 1956. An Introduction to the Literature of the Old Testament. Cleveland New York.
- Edzard, D. O. 1974. "Puzriš-Dagān Şilluš-Dagān." Zeitschrift für Assyriologie 63:288-294.
- Fox, J. and R. Wood. 1968. A Concise History of the French Language. Oxford.
- Garbell, I. 1958. "Remarks on the Historical Phonology of an East Mediterranean Arabic Dialect." Word 14:303-337.
- Gelb, I. J. 1970. Sargonic Texts in the Ashmolean Museum (Materials for the Assyrian Dictionary 5). Chicago.
- Goetze, A. 1946. "Sequence of Two Short Syllables in Akkadian." *Orientalia* 15 (N.S.): 233-238.
- Greenberg, J. 1969. "Some Methods of Dynamic Comparison in Linguistics." Substance and Structure of Language, pp. 147-203. Ed. J. Puhvel. Berkeley—Los Angeles.
- Gregoire-Groneberg, B. 1971. "Untersuchungen zum hymnisch-epischen Dialekt der altbabylonischen literarischen Texte." Ph.D. dissertation, Westfälische Wilhelms-Universität zu Münster.
- Harris, Z. 1939. Development of the Canaanite Dialects. New Haven.
- \_\_\_\_\_. 1941. "Linguistic Structure of Hebrew." Journal of the American Oriental Society 61:143-167.
- Hecker, K. 1968. Grammatik der Kültepe-Texte. Rome.
- Hetzron, R. 1969. "Third Person Singular Pronoun Suffixes in Proto-Semitic." Orientalia Suecana 18:101-127.
- Ibn Janah, Y. 1886. Le livre des parterres fleuris. Ed. J. Derenbourg. Paris.
- Ibn Kapron, Y., Y. Ibn Daud, and Y. Ibn Chiquitilla. 1870. Təsubot talmidey Mənahem ben Ya'aqov Ibn Saruq. Vienna.
- Joüon, P. 1923. Grammaire de l'hébreu biblique. Rome.
- Kahle, P. 1913. Masoreten des Ostens. Leipzig.
- \_\_\_\_. 1930. Masoreten des Westens II. Stuttgart.
- Kiparsky, P. 1973. "Phonological Representations." Three Dimensions of Linguistic Theory, pp. 75-82. Ed. O. Fujimura. Tokyo.
- Kisseberth, C. 1969. "On the Role of Derivational Constraints in Phonology." Mimeographed. Bloomington.
- Krahmalkov, C. R. 1970. "Studies in Phoenician and Punic Grammar." *Journal of Semitic Studies* 15:181-188.

- \_\_\_\_\_. 1972. "Comments on the Vocalization of the Suffix Pronoun of the Third Feminine Singular in Phoenician and Punic." *Journal of Semitic Studies* 17:68-75.
- Kutscher, E. Y. 1963. "Lašon hazal." Henoch Yalon Jubilee Volume, pp. 246–280. Eds. S. Lieberman et al. Jerusalem.
- \_\_\_\_\_. 1972a. "Aramaic." Encyclopedia Judaica 3:259-287.
- \_\_\_\_\_. 1972b. "Hebrew Language: Mishnaic." Encyclopedia Judaica 16:1590-1607.
- Lakoff, R. 1972. "Another Look at Drift." Linguistic Change and Generative Theory, pp. 172-198. Eds. R. Stockwell and R. Macauley. Bloomington.
- Malone, J. 1971. "Wave Theory, Rule Ordering, and Hebrew-Aramaic Segolation." *Journal of the American Oriental Society* 91:44-66.
- Mansour, J. 1974. Ha'arabit hayyəhudit šel Bagdad. Haifa.

Mishna Codex Kaufmann, 1968, Jerusalem,

Mishna Codex Paris, 1973, Jerusalem,

Mishna Codex Parma (De Rossi 138). 1970. Jerusalem.

Nöldeke, T. 1904a. Compendious Syriac Grammar. London.

\_\_\_\_\_. 1904b. Beiträge zur semitischen Sprachwissenschaft. Strassburg.

Pyle, C. 1974. "Why a Conspiracy?" Proceedings of the Parasession on Natural Phonology, pp. 275-284. Chicago.

Qimhi, D. 1842. Miklol. Lyck.

Rabin, C. 1951. Ancient West-Arabian. London.

Reiner, E. 1966. A Linguistic Analysis of Akkadian. The Hague.

Schaade, A. 1911. Sibawaihi's Lautlehre. Leiden.

Sibawaihi, 1881. Le livre de Sibawaihi I. Ed. H. Derenbourg. Paris.

\_\_\_\_. 1889. Le livre de Sibawaihi II. Ed. H. Derenbourg. Paris.

Sperber, A., ed. 1959-62. The Bible in Aramaic I-III. Leiden.

- Thureau-Dangin, F. 1925. "Un hymne a l'star de la haute époque babylonienne." Revue d'Assyriologie 22:169-177.
- Ungnad, A. 1906. "Das Nomen mit Suffixen im Semitischen." Wiener Zeitschrift für die Kunde des Morgenlandes 20:167-183.
- Von Soden, W. 1931. "Der hymnisch-epische Dialekt des Akkadischen." Zeitschrift für Assyriologie 40:163-227.
- Westenholz, J. and A. 1977. "Help for Rejected Suitors: The Old Akkadian Love Incantation MAD V 8." Orientalia 46:198-219.
- Yalon, H. 1964. Mabo laniqqud hammisna. Jerusalem.
- Yeivin, I. 1973a. Mibḥar kitbey yad bəsitot niqqud tabrani wə' ereş-yisrə' eli. Jerusalem.