The Place of the Word-Accent in Hebrew

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LANGUAGE is an historical product. As such it has its biography and chronology. Linguistic phenomena must therefore be studied genetically, that is to say, philologically. Empirical grammar is just as different from the philological kind as the homely interpretation of a literary document differs from skilled exegesis. The two methods may even yield contrary results. Thus, from the point of view of empiricism, the rule given in § 29 of the last edition of Gesenius' Hebrew Grammar that in the accentuation of Hebrew words milra' predominates is not quite correct even when the developed stage of the language is considered; the reverse is certainly the truth when we ascend to the beginnings. To prove my point, the following observations may be in place.

The traditional system of Hebrew accentuation can be mastered in its entirety only at the end of the Grammar. This is perhaps the reason why in the text-book alluded to it is scantily summarized at the threshold and then forgotten at the end. The metrical system is properly treated in Wright's Arabic Grammar at the end. That is the place where future Hebrew grammarians will have to discourse on Hebrew metre conveniently preceded by an account of the received accentuation. For it is clear that a knowledge of syntax is requisite for an adequate comprehension of the

1 The twenty-eighth, Leipzig, 1909.
2 "Der Hauptton der Wörter ruht nach der masoretischen Akzentuation meist auf der letzten Silbe, seltener auf der vorletzten."
3 See at the conclusion of this paper
4 § 16.
5 118, 858-368.
Yet a cursory orientation is imperative at the very beginning. "The sentence antedates the word; the sentence-accent is therefore necessarily more original than the word-accent." Without some sort of a knowledge of the Hebrew system of accentuation, an understanding of Hebrew phonology and morphology becomes nugatory. Now, the written text (ketib) of Scripture, on the surface at least, recognizes but two units; a maximal which is the section (סימן) and a minimal which is the word (דיבור). Between the two limits it would seem to discountenance all pauses. It knows of no verse-division. It will not commit itself to one interpretation: the Torah has "forty-nine faces." At a previous stage, when words were permitted to run together, the latitude of exegesis was still a wider one. The heavenly Torah, according to Nahmani, was written in scriptio continua (כיתיב רזאמה). Thus, the first words of Scripture might be read: In initio creatus Deus. The word-division is therefore something traditional; it ministers to sense, the simple sense. Now, the word itself is a composite (witness bo-salme-nu, "in our image"), just as a number of words might conceivably be combined into a sense-unit. The Samaritans write הר גרי, "Mount Gerizim," as one word. The Jews write בֵּית הִלְמָה, "Bethel," as one word, but בֵּית לֶם, "Bethlehem," as two words. Accordingly, the one is an

6 See Wickes, Poetical Accents, ch. iv; Prose Accents, ch. iv.
7 Wundt, Die Sprache (= Volkerpsychologie, i), ii, 393.
8 Sofrin 3, 7; see art. "Verse-Division" in JE.
9 p. Sanh. 22 a; see Bacher, Exeget. Terminologie, ii, 157 f. Comp. also b. Sanh. 34 a (Bacher, ibid., 72).
10 As may be exemplified by any line in the Eshmunazar Inscription.
11 Introd. to his commentary on the Pentateuch.
12 בָּרָא הַצְּבָתָא אֶלְכָּדַגָא.
13 See Cowley, Samaritan Liturgy, ii. p. liv (s.v.).
14 See Baer on Gen. 12 s.
15 On the subject of word-division in the biblical text comp. Sofrin 5, 10, 11 (and Müller's notes); p. Megillah 72 a; b. Pesahim 117 a; Norzi on Gen. 12 s. Ex. 17 s. The list No. 99 in 'Okla ye-'Okla (see the references to the Masora, Norzi, and Heidenheim Frensdorff, Massoret. Wbch., 399 a) enumerates fifteen words written as one word and read as two; three examples (יָדו, מָלֶכֶת, מְלָכָּה) contain ה, one (דּוֹר) מַעְצֹב, and two (מִרְכָּבָה, מִרְכָּבָת) ח as an element; in the remainder of the examples (with the
example of two words habitually run together, as the other
is of two words habitually separated. The spelling
as one word is equally habitual, traditional. It goes no fur­
ther than the habitual severance in the case of
“in the image of God.”

While the word, in its traditional limits, is the minimal
conceptual unit, it has no standing in phonetics. At least
in ordinary speech, pausation may and may not coincide
with the word-end. The minimal phonetic unit is the stress­
group (“Sprechtakt”); its measure is equivalent to the
distance between two consecutive strong-stressed syllables.
The length of a stress-group is relative to the whole of
a connected utterance, and varies according to the distribu­
tion of forces which itself is conditioned by the tempo of the
speaker or the nature of the literary piece as it is recited
with more or less solemnity. What in a slow, even tempo
appears as broken up into a number of groups becomes in a
recitation which aims at sense rather than at clear enuncia­
tion a compact unit with graded stresses (“Taktgruppe”).
Both the shorter and the longer groups are rhythmic figures;
in both, the intervals with weaker stresses will be reduced
to the shortest possible limit. In the received system of
Hebrew accentuation, there are shorter and longer groups
properly graded with reference to one another and to the
longest group of which they are component parts. Absolute
pausation is reached only at the end of a connected period
which may cover more than the measure of a single verse.
Within the period as a unit, relative pauses are freely dis­
tributed. Relative subordination of stresses is the supreme

exception of the keres is based on an exegetical conception not pre­
supposed by the ketib. Interesting are also the lists Nos. 100–102; the ex­
amples are again of unequal merit. The versions, notably the Septuagint,
show differences in the word-division; Jer. 23 35 is the best-known example;
see Driver, Notes on Samuel, p. xxx ff. In Arable and Syriac (but particu­
larly in Mandaic; see Noldeke, § 14) certain words (forms) are habitually
joined together; at the same time the converse process is equally observa­
ble. Mandalic-Talmudic רב, Mishnic יש in the editions, Biblical

21 On the subject of stress-groups and their gradation comp. Sievers,
Phonetik, §§ 630–658; Jespersen, Lehrbuch der Phonetik, § 210; Sweet,
Primer of Phonetics, §§ 91–113.
principle of the Hebrew system of accentuation. When the smallest measure is reached and it covers more than one word, the hyphen steps in as a mark of stress-union; in the relatively higher group, a “conjunctive accent” serves the same purpose; in the still higher group, a “disjunctive” of minor grade; and so on. Hyphenation goes naturally with a quickened tempo.17

It is well known that the retarded tempo was favored by Ben-Naphtali and the quicker by Ben-Asher. Where the latter is content with a hyphen, the former introduces an “accent.”18 The difference between the two cannot have been appreciably great.19 In proof of this proposition may be mentioned in the first place the fact that frequently a “conjunctive accent” appears in one and the same word in front of a “disjunctive.”20 Then, the spirantization of the הָלִיךְ is effected by an immediately preceding vowel whether in the same word or in two separate words, and it is immaterial in the latter instance whether the phonetic union is indicated by the hyphen or by a “conjunctive.”21 In either case, we are dealing with a stress-group, shorter or longer, spoken without a pause implying a fresh impulse of force. A further proof is afforded by the rules which the

17 A glance at (or preferably a reading aloud of) the first three verses of Scripture will substantiate the remarks in the text. I have in mind the interpretation of the unsophisticated Rashi. Had the accentuators chosen to make of the three one verse (comp. Kiddushin 30 a, with reference to Ex. 19 s; note in particular the decalogue according to the עַל וַעֲרֵי, there would have resulted visually a series of long groups held together by hyphens or by a multiplication of serif, whereas in the present less unwieldy division they are broken up into smaller groups coinciding for the most part, yet not altogether, with the word-division of the ketib. Once we adopt a less retarded mode of reading, the groups will lengthen, the words come closer together, and the hyphens multiply.

18 So e.g. Gen. 1 4, רָבָא, Ben-Asher; רָבָא, Ben-Naphtali. See Baer, Genesis, 81, n. 3.

19 Grimme, Hebr. Akzent-u. Vokallehre, 80; Praetorius, Über d. rückweitenden Accent, 7. Grimme’s view that the hyphen may be preceded by a strong stress is acceptable only if the relative gradation between it and the next following strong stress is had in mind.

20 E.g. מִיָּמָה, Deut. 7 12.

21 E.g. מִיָּמָה, Gen. 1 5; מִיָּמָה, 1 2.
rabbis lay down for the distinct articulation of every speech-element in the Shema’. The examples adduced cover indifferently words united by a hyphen and words joined together by means of a “conjunctive.” It follows that in ordinary reading which was less exact and therefore less retarded, not to mention ordinary speech, it was customary to utter all such word-groups with so complete a union of force that similar sounds were run together and that even the syllabic division was obliterated to such an extent that laryngeal sounds (the hamza, but also 'י) were ignored. But the strongest proof comes from the ketib itself. Whatever the cause of the peculiar orthography of the Koran (on which subject there is a difference of opinion between Vollers and Noldeke), so much is certain that the Hebrew ketib points to words spoken after the manner of the Arabic “pausals” and to others uttered in close union with their syntactical dominants, i.e. as the weaker elements of stress-groups.

The most obvious instance of a stress-group in the ketib is afforded by the 'iddāfeh construction with a feminine noun ending in -at as the mudāf. The retention of the closing consonant (t) is evidence of the close union of the component parts of the 'iddāfeh; contrast the disappearance of the same sound when the word is spoken pausally, “in the abso-

23 p. Berakot 4 d (see Alfasi according to Tosafot Berak. 15 b, s.v. מ"; Asheri, ad locum; Tür, Ḥorah Ḥeilim, § 61, with Karo’s note); b. Berak. 15 b.
24 E.g. יָדָם, יָדָשׁ, יָדָבָר, Deut. 11 12, 15.
25 The Arabic term is 'iddām, the Hebrew יָדָבָר. See Rīkma, 141 f. (reputed opinion of Saadia concerning the pronuciation of מ ב with 'iddām which is approved and carried further; the intervention of a “conjunctive” is pronounced no hindrance); Mikløs, smaller Venice edition, 95 ff.
26 Thus the fear was expressed that יָדָבָר רָדָבָר, Deut. 11 17, might sound like רָדָבָר; רדָבָר, כְּלָבָר, v. 21, like רדָבָר הָאֵבָר (both examples show by the way that מ and מ were not qualitatively different). See also Sofrim 5, 10, where יָדָבָר יָדָבָר יָדָבָר is deleted by the Gaon of Wilna, and comp. Wellhausen, Samuelis, v–vii; Margolis, ZAW, xxvii (1907), 257.
27 Volkssprache u. Schriftsprache im alten Arabien, 158.
28 Beiträge z. semit. Sprachwissenschaft, 7; Neue Beiträge, 1 ff.
29 Wright, li°, 388–373.
lute state." Thus, over against "תְּלָדָה, Gen. 4:2, we have 'תְּלָדָה, Ex. 3:5; the writing in two words, as was pointed out above, is just as habitual as is the union in one word in the case of 'תְּלָדָה, Gen. 4:23; it is simply a matter of orthography, but the morphological and phonetic configuration is identical in both cases. What is mutely hinted at by the ketib, is clearly brought out by the kere. The loss of the middle vowel (a) in קַהַה, whether in the combination קַהַה קַהַה or in קַהַה קַהַה, Gen. 47:20, exactly as in קַהַה קַהַה, when compared with its retention in קַהַה, shows that there is a difference in grade between the strong or pausal and the half-strong or non-pausal stress. It furthermore shows how immaterial it is whether the madaf is joined to its dominant by means of a hyphen or a "conjunctive." While the preference for the hyphen in קַהַה קַהַה קַהַה may be explained as due to a desire of avoiding a collision of the two stresses (the strong and the half-strong), no such reason obtains in the case of קַהַה קַהַה, Dan. 22:2. The hyphen is apparently the normal and the "conjunctive" a mere substitute; in a double קַהַה קַהַה קַהַה, a "disjunctive" of minor grade may be resorted to, but the morphological configuration will not be altered, as in קַהַה קַהַה קַהַה קַהַה, Josh. 5:2. The ketib is concerned solely with detached concepts; but the kere naturally joins together in utterance what is visually separate, and reduces phrases like רְמָאָה, רְמָאָה, רְמָאָה, רְמָאָה, to the level of רְמָאָה. For practical purposes, the rule may be laid down that the distribution of the vowels in the "construct state" of any noun will be exactly the same as in the nominal element preceding a so-called "heavy" suffix. 80

80 Praetorius, l.c. 9 ff.

80 Thus קַהַה קַהַה, Prov. 12:14 † קַהַה קַהַה, Num. 32:24; קַהַה קַהַה, Isa. 9:5 † קַהַה קַהַה, Gen. 31:8; קַהַה קַהַה, Ex. 15:8 † קַהַה קַהַה, Job 12:8, קַהַה קַהַה, Ex. 30:21 † קַהַה קַהַה, Jer. 18:21 † קַהַה קַהַה, Deut. 31:28, and so on. To קַהַה קַהַה as a construct state comp. קַהַה קַהַה, Deut. 28:8, which suggests קַהַה קַהַה, just as קַהַה קַהַה, Deut. 32:13, comports with קַהַה קַהַה, Lev. 26:8. קַהַה קַהַה, Lev. 19:8, would lead to קַהַה, actually witnessed to by the Greek transliteration אֲבַה; קַהַה, on the other hand, points the way to a possible קַהַה, comp. קַהַה (inferred from קַהַה, Ps. 102:11) by the side of קַהַה. Lam. 2:8. Comp. also קַהַה, Num. 31:8; קַהַה, Am. 9:14, which recall קַהַה; קַהַה. See AJSL. xii (1896). 210.
The weakened force with which the mudāf is uttered results in stresslessness when it consists of but one syllable, while a form consisting of more than one syllable is subject to half-strong stressing. In the case of the smallest measure of two syllables, the following rules seem to have governed the position of the stress:

1. Of two unequal syllables, the longer was stressed.
2. Where the duration was equal, the stress might conceivably rest on the one or the other. As a matter of fact, however, the only example in which both syllables maintained themselves in actual Hebrew is that of two long syllables, and then the stress rests on the second.
3. (Open) syllables with long vowels or closed syllables with short vowels were regarded as longer than (open) syllables with short vowels. But even the latter kind of syllables might be differentiated according to the sonority of the vowel, the vowel a surpassing in this respect the others.

In the form of a table, we obtain the following combinations:

| cv:cv | kā:la |
| cvcV: | 'abi:, šadaš:, binā: |
| cv:cv | ša:da |
| cvcV: | bina: |
| cvcV: | 'ašnaš: |

81 Properly speaking, there is no such thing as stresslessness; it is simply a case of "weak" stressing.

82 E.g. הָּמָד, Prov. 12:14. So soon, however, as the strong stress is deferred by the measure of a syllable, a half-strong stress is introduced, e.g. אַשְׁנָה, Ex. 28:21. The * (meteg) in itself is no sign of stress; it is really nothing more than a mark of caution for the purpose of preventing the slurring of a vowel when at a distance from the strong stress. See Baer, "Die Metheg-Setzung," in Merx's Archiv, i. 66 f. A closed syllable naturally protects its vowel; hence there is no call for the mark of caution; nevertheless, under the same conditions, a closed syllable is equally capable of being the bearer of a half-strong stress; pronounce accordingly אַשְׁנָה, Ex. 30:21, ḡq:kʾpla:m.

83 Provided, of course, the interval of a syllable separates it from the strong stress of the dominant.

84 Jespersen, i.e. § 192, end. It is to be remembered, however, that it is difficult to say which of the case-vowels was the more currently used in primitive Hebrew. Thus, the actual Hebrew form in a given case may have resulted from one of the cases, and then been used indiscriminately for the others as well.
It is clear from the Hebrew equivalents that an unstressed short vowel was subject to reduction or total loss in the syllable preceding, and to total loss in the syllable following, the half-strong stress.

So soon as the modaf grew in length beyond the measure of two syllables, antepenultimate stressing was out of the question when one or the other of the two closing syllables was long. The position of the stress was then determined by the preceding table; hence baru:ka, mamlak:ta, baru:kaf:, dabara:f:. On the other hand, when both the closing syllables were short, the stress might still be placed on the penultimate: gabura:ta, kabi:da, sadaka:ta. But antepenultimate stressing was quite as possible: tah:ata, ka:bi:da, 'ata:rata. As for the part of the word preceding the (half-strong) stress, it is clear that it was spoken with so quick a tempo as to leave room at best for a second, quarter-strong, stress. The conditions are obvious. In the first place, the two stresses had to be separated by at least one syllable. Then, the syllable which became the bearer of the weaker stress might itself be short or long; when short, a further condition attached itself that the intervening syllable must likewise be short; when the latter was long, it entrained the immediately preceding short syllable and the two together became unstressed. Thus mamlak:ta, da:baraq:, but gabura:ta. The effect of a stress, whether half or quarter strong, was to protect the vowel which bore it, while unstressed vowels succumbed. Hence the examples selected in the foregoing assumed in Hebrew the forms nabir, nabi, sabir, zabir, vabir, yabir, mablulot, nabirat, zabirat, yabirat. It is evident that those with milra' accentuation were — sit venia verbo— mil'el in primitive Hebrew. It may further be observed

25 Comp., however, Origen's transliteration λφωι for ḳωλ, Ps. 46 a. The nearest approach to it in the Tiberian nikud is ḳω, and the like (on ḳω, see Kahle, D. MT. des AT. nach d. babylon. Überlieferung, 27; examples are available to me from a masoretic Genizah fragment which Dr. Schechter has been kind enough to turn over to me for publication, and from Origen). After all, the grammarian Hanau was not altogether wrong with his theory of the חַל (see his חַל, ed. Grodno, 1806, 14, 18 ff.).
that, so soon as the strong stress of the dominant collides with the half strong of the *muḏāf*, the latter recedes by the measure of one (Hebrew) syllable, thus often coinciding with the place formerly occupied by the next weaker stress, visibly when the *muḏāf* has a "conjunctive," invisibly when the latter is replaced by a hyphen.\(^{38}\)

When the syntactical dominant is a pronoun in the place of a noun, it and the nominal *muḏāf* are orthographically conjoined in one word. But that, as was pointed out above, is solely a matter of habit. Of greater importance is the circumstance that the strong stress falls on the nominal element, the pronoun becoming an enclitic. In the case of the so-called "light" suffixes, that is, of the pronominal element consisting of one syllable, the fact is obvious enough, recalling Greek analogies.\(^{37}\) A phonetic result is the reduction\(^{38}\) and even subsequent loss of closing long vowels, and the immediate loss of short vowels in the same position: hence *pi* (<*pi*-יָa), *pi*-等候 (<*pi*-הָ), *pi*-ה (<*pi*-הָ); but long ُremains: *pi*-nu, *pi*-hu (*pi*-י). With the lengthening of the nominal form the stress due on the enclitic is thrown back on the closing vowel of the nominal element\(^{40}\) which it thus safeguards; in the historical development of the language, this stress becomes the main (strong) stress of the combination; hence *dābāre*-נָו < *dabadāri*-נָו, etc. In the case of the so-called "heavy" suffixes, that is, the pronominal elements which originally consisted of two syllables (with a long vowel in the second) (-kimā, -kinā, -himā, -hinā), it is clear that the weight of the suffix might resist enclisis.\(^{40}\) Either the stress indigenous to the pronominal element rested on the long ultima, then the stresslessness of the preceding syllable with the ensuing loss of its vowel (entraining in turn the disappearance of the

\(^{38}\) See Praetorius' work cited above, and comp. above, n. 32.

\(^{37}\) Comp. *φωνι* μου.

\(^{39}\) *ζι* < *זִי*. Kühner-Blass, *Griech. Gramm.*, 18, § 89, n. 2: "Lange Silben der Encliticae werden in Beziehung auf die Betonung als kurze angesehen, weil die enklitischen Wörter rasch und ohne Nachdruck gesprochen werden."

\(^{39}\) Comp. Greek σῶμα μου.

\(^{40}\) Comp. Greek φωνέ μου.
next preceding laryngal) caused the stress of the enclitic to be thrown back on the stem-final of the noun which then became the main stress of the combination: $dābārā\text{-}mō$ (the next step was $dābārā\text{-}m$) $< dābā\text{-}rā\text{-}hīmā$. Or the stress rested on the penultimate, causing reduction in the length of the concluding vowel, and on the other side stresslessness of the preceding stem-final of the noun; hence $dābā\text{-}rē\text{-}mā$, $dābā\text{-}rē\text{-}mā$ (from which $dābā\text{-}rē\text{-}m$, $dābā\text{-}rē\text{-}m$). But the tendency of throwing back the stress of the enclitic on the stem-final of the noun might prevail; hence $mā\text{-}rē\text{-}mā$, $mā\text{-}rē\text{-}mā$ ($= kūlā\text{-}hīm$).

Thus, where in the combination of noun plus possessive pronoun we find in historical Hebrew $mīlā\text{-}rē\text{-}hīm$ accentuation, as in $mā\text{-}rē\text{-}hīm$, $mā\text{-}rē\text{-}hīm$, the forms upon which they are based, and which with the exception of the first still occur by the side of the others, are all $mīl\text{'}ēl$.

As for the second part of the $'iðāfēh$, when it consists of a noun in isolation (unencumbered by suffixes), it resembles to all intents and purposes the Arabic pausal.\textsuperscript{42} It is clear that the Arabic forms themselves presuppose the absence of the $tānțīm$, and that the strong stress remained there where it was when the stem-finals were still sounded. Hence the $mīlā\text{-}rē\text{-}hīm$ accentuation of the so-called “absolute state” is something comparatively recent. The permanence of the short vowel in the syllable preceding the strong stress, no matter what one may think of its quantity in Hebrew,\textsuperscript{43} is apparently due to the retarded pronunciation characteristic of pausals; contrast the reduction of the same vowel when followed by the half-strong stress. It is well known that the vowels $i$ and $u$ more readily succumb even before pausals than the vowel $a$; another instance of the greater sonority of the latter.

Outside the $'iðāfēh$, which is the most natural stress-group suggested by the $kētīb$, other stress-groups are created by the $kērē$ whatsoever a syntactical union manifests itself, as for instance between nouns joined by means of “and” or be-

\textsuperscript{42} Comp. $'āp$ with $'āp$, $mā\text{-}līkāh$ with $mā\text{-}līkāh$, $mā\text{-}līkāh$ with $mā\text{-}līkāh$, $mā\text{-}līkāh$ with $mā\text{-}līkāh$, and so on. See the reference above, n. 28.

\textsuperscript{43} See Grimme, l.c. 49 f.; Brockelmann, Grundriss, i. 101.
tween a noun and its attributive adjective. Thus we find

Esth. 1 22, compared with

Eccl. 9 7, compared with

But here likewise the ketib led the way; comp.

Note

There is a tendency therefore to keep the “absolute state” intact within the stress-group.

When we turn to the verb, the forms in combination with objective suffixes are developed accentually exactly as the corresponding forms of the noun when combined with possessive suffixes. The forms with the endings -ūna, -ina, are built, at least in “pause,” exactly like the corresponding nominal forms ending in -ima, quite correctly, for the “absolute state” of the noun represents a primitive pausal. Just as the strong stress with which these forms were spoken is recognizable by the maintenance of the vowel (long or short) in the syllable near the stress, so conversely the reduction of a short vowel in the same position must needs indicate the half-strong stress which belongs to the form when joined to another word in one stress-group. The same difference between pause and con-

Comp. also נֶּפֶל על, Isa. 34 17 over against נֶּפֶל על, 34 19. Comp. also נֶּפֶל על, Ps. 148 6 (object plus verb) by the side of נֶּפֶל על.

Comp., however, נֶּפֶל על, Gen. 28 19 (Greek σεμ εαπ).

Comp. נֶּפֶל, Gen. 31 1, with וָּטָנ, Num. 30 3; נֶּפֶל, Esth. 5 11, with נֶּפֶל, Ps. 30 12, etc. Forms like נֶּפֶל על, Jer. 22 24, and their like have their analogies in נֶּפֶל על, Gen. 35 11. In נֶּפֶל על, Ps. 118 22, the accent advances exactly as in נֶּפֶל על, Jdg. 8 7; hence we are at liberty to construct נֶּפֶל על, נֶּפֶל על, etc.

Comp. נֶּפֶל על, Deut. 33 11, by the side of נֶּפֶל על, 1 Sam. 23 21, נֶּפֶל על, Isa. 50 11, נֶּפֶל על, Ruth 2 8, by the side of נֶּפֶל על, Ezek. 21 7.

Hence נֶּפֶל על, 1 Sam. 2 22, contrasted with נֶּפֶל על, Josh. 2 8. Comp., on the other hand, נֶּפֶל על, Gen. 19 4. Both forms reveal the via inertiae of the stress which remains there where it stood in primitive Hebrew when endings consisting of two syllables were stressed while monosyllabic endings were unstressed. I am speaking of what was, or came to be, the strong stress. For when a form ending in a monosyllabic termination was joined in the context to the word next following in a stress-group, the half-strong stress might be allowed to rest on the monosyllabic ending; hence נֶּפֶל על, Eccl. 4 11. In the context, therefore, both forms
text accentuation is found with the endings τ = -an, and τ = -at. 48 Both the "pausal" ḫ and the "absolute" ḫ, Ps. 51 19, are primitive pausals; the difference in the position of the stress rests on the circumstance that whereas the verbal form ended primitively in -at, the nominal form ended in -atu(n). 49 In the contextual forms the difference was naturally obliterated. But even there mil'el accentuation is retained when the penultimate syllable is a long one. 50

The (subjective) pronominal suffixes which meet us in the forms of the first and second person of the "perfect" are seemingly on an equal footing with the objective pronominal suffixes joined to nominal or verbal forms, accentually speaking. That is to say, the suffixes of a pronominal character are originally enclitic. Where in the present state of the language the accent nevertheless rests on the suffix, as in the case of the "heavy" suffixes, the longer form of the suffix merely resisted the enclisis, with the result that in the combination what was originally the half-strong stress came to be the strong stress, and vice versa. ḫ, ḫ, Josh. 22 3, ḫ, Neh. 9 17, and ḫ (inferred by analogy) show on the surface the same accentuation. Yet the following point of difference must not be overlooked. As is shown by the spirant in ḫ over against the explosive in ḫ, the objective suffixes were joined to the form with its stem-final preserved, while the subjective suffixes were appended to the form after it had lost its stem-final. It follows from the nature of the formation of the "perfect" (which has its ending in the longer termination and those with the shorter are indifferently milra, while in pause only the former can be milra', the latter being necessarily mil'el.

48 Comp. ḫ, Gen. 18 20; ḫ, Ps. 34 21; but ḫ, ḫ, Jer. 48 4.

49 Hence also the dissonance between ḫ, Deut. 32 44, and ḫ, Prov. 31 12. See on the latter form and its like, AJSL, xix (1902), 46 ff. In the forms with "heavy" suffixes, both sets of forms naturally coincide (see ibid. 168).

50 Comp. ḫ, Prov. 31 26; ḫ, 2 Kings 25 1; ḫ, ḫ, Gen. 8 1 (but ḫ, Jer. 14 7), etc.
analogies in late historical combinations of the participle with the pronoun in Aramaic that we are dealing in its case with a less archaic composition than in the instance of noun plus possessive suffix (and the verb plus objective suffix). It may be laid down as certain that the noun antecedes the verb, and that in the verb the imperfect is more ancient than the perfect. (comp. , Gen. 32 11) is but an abbreviated , 1 Sam. 15 17. While in historical Hebrew the distribution of stresses in a phrase like proceeds in such a manner that the pronoun is the bearer of the strong stress, a different gradation is clearly presupposed in , where the strong stress rested on the nominal element of the combination (the predicate); hence the preservation of the vowel in the syllable preceding the strong stress, exactly as in the case of , etc. As for the form of the third person singular, the pausal form (e.g. , Ps. 9 13) requires no further explanation; it is exactly analogous to the "absolute state" of the noun. But the contextual form (e.g. , Jer. 44 21) has long been a puzzle; for while it follows the analogy of the "construct state" of the noun with regard to the vowel of the ultima, thus indicating a corresponding half-strong stress, the retention of the vowel of the penultima is difficult. Yet it is no more difficult than the retention of the same vowel in the contextual forms of the pattern , Lam. 1 7, , Gen. 37 4, and even , Deut. 8 3 (comp. also 37 32 as); the forms are clearly late when their vocalization is considered, the earlier forms for which, at least in the case of the feminine singular, Aramaic analogies exist, having been supplanted. The truth is that in entering a combination with another word as a stress-group, the verbal form resisted complete subordination; and the reason is obviously this that a verbal form is a complete sentence in itself; hence its syntactical union with any word can be properly only of a sec-

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81 Syriac, Mandale, Talmudic, Neo-Syriac.
82 See Grimme, l.c. 49.
83 Comp. Dan. 7 20, 5 10.
ondary character. The same holds good of the forms of the imperfect without “afformatives”; the persistence of the long vowel, as for instance in the דִּבְרֵי forms, shows clearly that we are dealing with primitive pausals, the strong stress effecting the retention of a short vowel in the syllable preceding it, which vowel remains in the developed language also in the context. Comp. also the treatment of the “absolute state” of the noun in similar conditions adverted to above.

An equally late procedure, dating from historical times, is the retention of an unstressed vowel which has become so in consequence of the shifting of the accent farther to the end of the word in the perfect with the so-called 'consecutive. Hence תְרֵל, Deut. 15:12, contrasted with יִנְּהָרֶה, 1 Sam. 1:11, etc. In the case of a long vowel in the penultimate, the accentuation fluctuates between milra' and mil'el. The pausal accent equally acts as a check on the shifting of the accent.

On the other hand, the pausal accent effects milra' accentuation in the case of the imperfect plus the so-called 'consecutive in all forms not containing “afformatives.” The pausal accent namely introduces normal accentuation of words spoken in isolation. In the context, on the other hand, the primitive mode of stress persisted. The common statement that the 'consecutive is prefixed to the jussive form of the imperfect is mechanical and misleading. It is true that a similar mode of stressing obtains in both. But the reasons were absolutely different. The jussive and imperative were primitively spoken with the so-called “interjectional” accent. The imperfect following a 'consecutive, on the other hand, was originally a “conjunct” form with the stress resting on the relatively more important conjunction; in historical Hebrew, where the accent could not go farther than the penultimate, and certainly not to the conjunctional prefix, it was placed as near its original position as possible; hence mil'el accentuation.

64 Contrast דָּבְרֵי || Arab. 'akū-m-u, with יִנְּהָרֶה || Arab. taḥu-m-na.
65 Comp. especially the forms of יַעֲל roots.
66 On the meaning of the terms “interjectional” and “conjunct,” see the references in AJSL, xix (1902), 46, n. 4.
As with the ending מ in the verb, so it fares with the old case-ending מ = -a (the primitive pausal for -an) in the noun; hence יִּשָּׁר, Gen. 24 32. It is to be observed that the nominal form is kept intact as far as possible; hence יִּשָּׁר,Josh. 18 42, יִּשָּׁר,Gen. 18 6, and the like; the stress falls in all cases upon the syllable which has it in the unencumbered form.

The preceding investigation has, I believe, shown conclusively that, genetically considered, מילא accentuation predominates in Hebrew. In the primitive language, ultimate accentuation was possible only in connection with the half-strong stress resting on a long closing syllable. In all other forms, whether primitively pausal or non-pausal, the stress was found anywhere but on the ultima. Where we have in the present Hebrew ultimate accentuation, we are confronted by a loss of a syllable (through the disappearance of the stem-final, the reduction of dissyllabic suffixes to monosyllabic in consequence of the loss of the final vowel or contraction), or we are dealing with modern contextual forms. The rule currently given in our text-books about the predominance of מילא accentuation of Hebrew to which attention was drawn at the beginning of this paper disregards not only the genesis of forms, but abstracts likewise from the by-forms which are still preserved in historical Hebrew. Moreover, if types of forms are had in mind, the rule breaks down on the basis of pure statistics; one need only compare the forms of the perfect in pause, and the result is obvious: the proportion of מילא to מילא is 6:3.

67 How late the non-pausal or contextual forms are, has been shown above. In the case of מ, (still worse is the case of מ), the absence of a contextual מ (in the place of מ) shows the lateness of the form. The occasional forms like מ are developed correctly enough; comp. the feminine forms. In Origen's transliteration such forms predominate; perhaps through the influence of the Aramaic; comp. the parallel forms of the perfect like פאש, etc. There is reason to believe that where the מ is absent in the ketib, a similar Aramaic pronunciation was intended. The כר, as elsewhere, reintroduced the more archaic forms; or rather, it levelled down forms minus מ to those with מ. The same was done by the כר in connection with מ which was assimilated to מ in all but three cases (Num. 11 4, Deut. 5 6, Ezek. 28 11). On מ, see AJSL, xix (1903), 165.