

## THE METRICAL BASIS OF HEBREW POETRY

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Many and various are the systems which seek to explain the metrical basis of Hebrew poetry. Some are avowedly tentative; others are resentful of question. Whether or not successful in the case of certain psalms and other portions of Hebrew poetry, they often prove inadequate when applied to poems to which their underlying bases are unfavorable. In the case of some the shortcomings are frankly admitted; more often the defects of a system are circumvented to the author's satisfaction by the introduction of serious changes both in text and in accentuation. Few systems which can be unriddled by others than their respective authors pretend to be applicable to all Hebrew poetry. Even Schlögl, whose system is "brilliantly confirmed" by Proverbs, Job, Ecclesiastes, and Sirach, admits that it applies to only "considerably over 90 per cent" of these books. But surely, he thinks, this could not be mere chance; for the meter of about 67 per cent of the psalms is correct, according to his principles.<sup>1</sup>

At present the tendency is the other way, to push these theories into the background, and to ascribe the rhythm of Hebrew poetry to the strong emotion under which the poet worked. According to this belief the poet, moved by his subject, cast his work into rhythmic form. But this explanation is just as inadequate as the highly artificial, mechanical theories put forward, for it answers neither the question, What is this rhythmic form? nor, Why is one particular form used in the case of a poem rather than some other? The poet may have written one verse in rhythmic form without knowing how it became so arranged, but when he could write another and another, and not only that, but cast his poems in acrostics, could arrange long poems in strophes and antistrophes, refrains, and the thought in parallelisms, complex as well as simple, he may not be said to have been actuated by strong impulse without a recognition of objective

<sup>1</sup> N. Schlögl, *Die echte biblisch-hebräische Metrik* (1912), p. 69.

standards. An explanation of rhythmic form such as this is falls short of being a real explication of the meter of Hebrew poetry.<sup>1</sup>

That there is a rhythm in Hebrew poetry is not open to question; whether or not there is a meter is the subject of this study. The rhythm of Hebrew poetry will be considered from two standpoints: first, in a comparative study of meter; secondly, in an objective study of rhythm.

### COMPARATIVE STUDY

To reconstruct a metrical system such as that in accordance with which the biblical poems were written would be a most difficult task; and indeed the many bases put forward are evidence of this. Fundamentally, however, rhythm is of such a nature that the principles underlying the rhythm of Hebrew poetry must have something in common with the principles of poetry of other languages, whose metrical or rhythmical bases are known.

The most satisfactory results in the study of Hebrew meter heretofore have, in fact, been obtained by proceeding from this comparative standpoint. G. Dalman observed a rather free rhythm among the natives of modern Palestine,<sup>2</sup> which, though it cannot explain Hebrew meter or rhythm, shows at least that it was not an artificial structure of grammarians, but was intimately bound up with the life of the people. The simple songs he refers to are inspired by emotion and sentiment. Their rather free rhythm, Koenig<sup>3</sup> believes, is found also in the Old Testament. But while there is a resemblance here, it must be remembered that these songs are folk-songs, or are improvised very much as the Italian *stornelli*, and that Hebrew poetry is the product of a highly developed art.<sup>4</sup>

<sup>1</sup> It is perfectly true that the writer of poetry, while working, does not regard the laws of meter as does the critic. T. Witton Davies (*Inter. Standard Bible Encyc.*, art. "Poetry") has well pointed out that poetry precedes prosody. This is especially true in Hebrew poetry, where the meter and sense are closely bound up. The poet is carried along by his rhythm and thought, and, though he may not say in so many words, "The last foot was a trochee, the next will be likewise," yet, like the artist who need no longer be conscious of the principles of his art, he or his critic may later examine what he has done, and assign it to a certain category or classification.

<sup>2</sup> G. Dalman, *Palästinischer Diwan*, referred to by E. Koenig in his *Hebräische Rhythmik* (1914), p. 20.

<sup>3</sup> Koenig, *op. cit.*, p. 20.

<sup>4</sup> Nearly all the investigations of Hebrew meter from the comparative standpoint were in cognate languages. With one of them often a resemblance was thought to be seen to some portion of Hebrew poetry, and the metrical rules of the language compared were forthwith laid down, in an overconfident belief, as the rules of all Hebrew poetry.

Moreover, a comparative study considers not only the poetry of cognate languages but also that of different languages of contemporaneous vitality. It also compares ancient and modern bases of poetry. The first examination must be of ancient languages (for reasons which will appear later), if we wish to institute a comparative study of meter in connection with Hebrew poetry, and of these it is for the greater part in Sanskrit poetry that we find a class of meters which, in certain respects, are similar to the metrical form of Hebrew poetry. These Sanskrit meters are in the quantitative group, as distinguished from the syllable-count meters, and are called by the native grammarians *gaṇachandas*, or meter divided into feet. It is with the light that these can throw on the nature of Hebrew poetry that we are here concerned.

#### SANSKRIT METERS

The meters of Sanskrit prosody may be divided into two classes or groups, one governed by the number of syllables—a syllable count; the other governed by the number of morae—a mora count. The former is the basis of the meter of the Vedas, for in the vedic meters syllables were not differentiated as to length, but merely counted.<sup>1</sup> The second class is divided into the *gaṇachandas*, which depends on the number of morae, not on the number of syllables, and, as stated above, is divided into feet; the *mātrāchandas*, which also depends on the number of morae in the verse or stanza, but is not considered to be so divided; and the *varṇa-vṛtti*, which combines a fixed number of syllables with a prescribed arrangement of morae.

The meter with which we are concerned is the *āryā* meter, which is contained in the first of these groups, and in which the division into metrical feet is observed. In the quantitative meters in Sanskrit a heavy syllable is considered to be equal to two morae and a light syllable equivalent to one mora. In the *āryā* foot there are, for the greater part, four morae. These are not, however, arranged according to a repeating meter scheme as regards the foot, but appear as two long syllables; or as a long syllable followed by two short syllables, between two short syllables, or at the end of the foot; or

<sup>1</sup> Weber, *Indische Studien*, VIII, 22.

as four short syllables. The *āryā* meter was the customary meter in certain philosophical works of the literary period, the post-vedic period, but its more common use was an intermixture with verses of other kinds.<sup>1</sup>

The characteristic of *āryā* meter, with which the comparison with Hebrew poetry is instituted, is the free variation in the mora arrangement of the foot. Moreover, in the *varṇa-vṛtti* meters, syllable-count meters in which the arrangement of morae is fixed, the line is composed of feet in which not only the arrangement but the number of morae vary. There may be some difference as to the division into feet, but the variation is present in any case. One of these, the *vasanta-tilakā* meter, literally, "grace of the springtime," which is one of the meters in most general use, consists of a spondee, iamb, tribrach, dactyl, trochee, and spondee.<sup>2</sup>

It will be seen that the general characteristics of the class of Sanskrit poetry pointed out here are applicable in certain respects to the metrical arrangement of Hebrew poetry. The Sanskrit poetry itself which is written in these meters, though in some respects more mechanical, in other respects freer than Hebrew meter, bears some resemblance to it, and a comparison between the rhythm of the two is quite possible. The *āryā* basis permits a variation in the foot which is present in much the same form in Hebrew poetry. In neither of these poetries is there a repetition in the arrangement of differentiated syllables, nor is this condition found in any biblical Hebrew poetry, although occasionally there may be verses in which such an arrangement is present. But it is quite evident that the metrical basis which we may consider to be a real basis of Hebrew poetry (1) must be applicable to all Hebrew poetry of the Bible, and not to a certain percentage only; (2) must allow a certain freedom from regularity, which, it will be seen, the nature of the language requires; and (3) must not make violent and unwarrantable changes in the text, such as would be permitted in no other classical study. The different systems which were proposed at various times were inadequate when measured by one or more of these requirements. Most were at fault with respect to the third principle; some even fell short of the first.

<sup>1</sup> *Ibid.*, p. 209; Colebrooke, *Misc. Essays*, p. 67.

<sup>2</sup> Colebrooke, *ibid.*, p. 106.

## THE MORA BASIS

The basis of the *āryā* meter is the mora. The mora basis has, however, been rejected in the meter of Hebrew poetry by Sievers, Koenig, Rothstein, Budde, and others, who have come to the conclusion that Hebrew poetry is accentual solely. But Koenig's categorical rejection of the mora basis because a regular alternation of long and short syllables, as in classical poetry, cannot be discovered<sup>1</sup> does not at all apply to Hebrew poetry. His adoption of the accentual basis, moreover, is not because any facts point to it, but because it is the only possibility left. For, he says, into these two categories is (poetical) literature divided.<sup>2</sup>

On the other hand, Jones, Bellerman,<sup>3</sup> Saalschütz, and Ley, and more recently Grimme, and after him Schlögl, have come to the conclusion that Hebrew poetry is metrical, that it has a mora basis. They have, however, interpreted this in different ways. Post-biblical writers on the subject, as is to be expected, gave a classical interpretation to Hebrew meter, i.e., a regular alternation of long and short syllables. Jones, of those mentioned above, attempted a similar plan. This Koenig properly rejects, because it is evident that such interpretations do not hold true, and even after the text has been irrerecognizably mutilated to fit the theory are only partly applicable.

This very thing Koenig warns against in his accentual rhythm, namely, attempts, such as G. Bickell's, to find an accented and unaccented syllable alternating regularly.<sup>4</sup> Ordinarily accentual rhythm does require a regularity of accented and unaccented syllables. There appears to be an apparent departure from this rule in the rhythm of the *Nibelungenlied*. Likewise, ordinarily the syllables in quantitative poetry alternate in long and short syllables. A departure from this rule is seen to a certain extent in the Sanskrit poetry referred to, and to an extent even equal to that of the departure of the rhythm of the *Nibelungenlied* from the accentual basis, in the rhythm of Hebrew poetry, which will be described. It will be

<sup>1</sup> Koenig, *op. cit.*, p. 16.

<sup>2</sup> *Ibid.*, p. 18.

<sup>3</sup> For an account of Bellerman's system see Cobb, *Criticism of Systems of Hebrew Metre* (1905), pp. 36 f.

<sup>4</sup> Koenig, *op. cit.*, p. 22.

seen, however, that in neither of these types of poetries is there anything in the rhythm which is not characteristic of poetical-rhythm in general.<sup>1</sup>

As far as I can see, the most proper recognition of the significance of the mora in Hebrew meter is that of H. Grimme,<sup>2</sup> but while he recognizes the correct principle, his application is formal and not essential. He does not see the relation of the word to the foot, which is a fundamental and necessary characteristic of Hebrew poetry. Furthermore, the number of morae he allows would not permit the rapid changes of thought and feeling so extensively present. In short, the mora basis, as he treats it, is simply a formal arrangement of syllable holdings. The morae bear no significant relation to the reading and sense, and his system, while allowing a certain freedom, is unwieldy. It permits of no further investigation into the nature of metrical feet.

Koenig's objection to the mora basis is rather that the accentual basis has been decided on, and that the quantitative view limits it—that the subject is closed, and the latter reopens it—than any valid objection against the mora basis itself. But his specific criticism of Grimme's system is more to the point. Grimme distinguishes three grades of tone, a main tone, a secondary tone, and a weak tone. He also distinguishes four degrees of morae, syllables with four, three, two, and one mora. These are combined in certain ways.<sup>3</sup> At first glance this system appears theoretically logical. It is, however, impracticable. Koenig takes an example of one application. Grimme

<sup>1</sup> An almost identical controversy exists over the early Latin Saturnian meter, which was written before the introduction of Greek prosody, as to whether it was quantitative or accentual. Was it

"Dabúnt malúm Metélli || Naéuío poétae"

or

"Dábunt málum Metélli || Naéuio poétae" ?

It will be worth while to bear in mind the parallel controversies. Saturnian verse will be referred to *infra*.

<sup>2</sup> Grimme, *Die Oden Salomos* (1911), p. 117, quoted by Koenig, *op. cit.*, p. 23. "Der Takt. Er ist stets steigender Art, und zwar kann sich sein Aufstieg über ein bis drei Silben erstrecken, während der Gipfel immer durch eine Silbe dargestellt ist. Der erste Takt des Verses kann des Aufstiegs entbehren, der letzte einen einsilbigen Abstieg dem Gipfel folgen lassen. Wenn der Gipfel auf eine haupttonige Silbe fällt, so muss der Takt wenigstens fünf Moren zählen; fällt er auf eine nebetonige Silbe, so beträgt das Minimum von Moren die Zahl sechs. Bei Takten ohne Aufstieg verringert sich dieses Minimum von Moren auf fünf, bzw. vier."

<sup>3</sup> For which see Grimme, "Abriss der biblisch-hebräischen Metrik," *ZDMG* (1896), pp. 539 f.

says a main-toned syllable is a rise when, coming at the beginning of a dipody or tripody, it counts with the following less-toned syllable at least seven morae. In *kī l<sup>e</sup>cōlām ḥašdō* (Ps. 136:1b), therefore, *kī* has three morae, *l<sup>e</sup>* one morae, *cō* three morae. Why, Koenig asks, can there not be a rise if there are only six morae before the next rise? Why must there be just seven morae?<sup>1</sup> One might also ask how a poet could have written under a scheme involving so much mathematical calculation. Grimme, in other words, has not broken away from the classical distinction of long and short syllables, since he assigns degrees of syllable lengths of one, two, and three morae to long and short syllables.

Two things, however, Grimme did recognize, which are of great importance: (1) the accented syllable is the most important syllable; (2) this syllable has a certain number of morae.<sup>2</sup>

#### APPLICATION OF *āryā* METER TO HEBREW POETRY

In an application of the principles of *āryā* meter to Hebrew poetry, it will be seen that the basis of Hebrew poetry is quite similar to that of the *āryā* meter, but when the necessary adaptations are made it is, for certain reasons, more complex.

Hebrew meter, which we may call *ʾathnāḥ*<sup>3</sup> meter, is based on the number of morae—not on the number of syllables.

*An accented syllable counts as two morae, an unaccented syllable as one.*

The heavy syllable of *āryā* meter, which in Sanskrit has two morae, is in Hebrew the accented syllable—the tone syllable; the unaccented syllable is the light syllable, and this is as in other

<sup>1</sup> Koenig, *op. cit.*, p. 24.

<sup>2</sup> For the places of morae in Schlögl's system see his *Die echte biblisch-hebräische Metrik*, which on his own admission is the only real, correct system of Hebrew meter. He comes nearer to the rhythm of the songs of modern Palestine in the flexibility of this meter. He, like Grimme, however, did not see the significance of the relation of the word to the foot, and, with Sievers, Grimme calls all Hebrew rhythm ascending, so that when he applies various feet to his meter (p. 79) he arrives at a mélange of morae, accentual rhythm, classical meter, and his special system of accent, which has lost whatever basis it had in Hebrew poetry. As Koenig points out (*op. cit.*, p. 27), the accent which Schlögl constructs arises, not from the necessary nature of the syllables, but to meet the required number of rises.

<sup>3</sup> *ʾathnāḥ* meter referring to mora or pause meter. This term is used in connection with biblical Hebrew meter to distinguish it from post-biblical meter, which uses other metrical bases.

quantitative meters.<sup>1</sup> In general there are two kinds of feet, a foot of three morae and a foot of four morae. The foot of four morae falls into forms which for brevity's sake may be called dactyls, anapaests, or amphibrachs (as in the Sanskrit meter); a foot of three morae in the form of iambs or trochees. These terms refer to types of feet, seldom to kinds of rhythm.<sup>2</sup>

#### MORA AND ACCENT BASIS

Before examining examples of scansion a word may be said on the nature of the syllable which in Hebrew poetry has two morae. Whatever the nature of the accent in Hebrew may be, its significance for us lies in differentiating one syllable from the rest. The mode of distinguishing it is by stress. This leads to a consideration of the nature of the mora and the accent basis. The difference between accentual and quantitative meter is not so great as is commonly supposed. It is a difference of degree rather than of kind. First the general proposition will be considered; then its special application to Hebrew poetry.

It is evident that no sound can have duration without intensity, or intensity without duration, and it is whether the aspect of intensity or of duration is emphasized that makes rhythm accentual or quantitative. Rhythm itself in poetry is obtained by giving prominence to one syllable which holds a certain position relative to other syllables. Both bases seek to attain rhythm by giving prominence to this syllable, quantitative by greater duration, accentual by greater

<sup>1</sup> In Greek and Latin classical poetry, as well as in Sanskrit and Hebrew, the syllable which might be designated as "heavy" (in Greek "long," in Sanskrit "heavy," in Hebrew "accented") and which furnishes the duration contrast in quantitative meter is said to have two morae; the syllable called "light" has one. This distinction and the ratio, whatever it may have been (see Goodell, *Chapters on Greek Metric*, pp. 114 and 240), are the elements which give rise to quantitative rhythm.

The term "syllable" in this connection, in the expression "long syllable" or "short syllable," does not refer to any particular syllable, but to relative time-lengths, or to frameworks in which one or more syllables may fit.

<sup>2</sup> Koenig, Sievers, Rothstein, and Budde are correct in saying that the number of feet in a line of Hebrew poetry depends on the accented syllable, but they failed to see what relation these bore to the unaccented syllables. Bickell, Schlögl, and Grimme attempted to find a relation, but their results were too "mechanical" to lead to anything.

If accented syllables were alone counted, as advocated by Sievers and Koenig, there would be nothing to distinguish Hebrew poetry from prose. As if to illustrate this very point, we find Sievers trying to reduce the narrative parts of Genesis to poetical form, with results which Koenig correctly designates as "not natural."



intensity. Pitch may give rise to a type of rhythm, but poetical rhythm for the greater part employs duration or stress.

Certain languages are better adapted for one or the other type of rhythm, or even the same language under different conditions will rely on different bases.<sup>1</sup> Languages in which the sounds are spoken rather than sung, where each sound is forced out (expiratory languages) and the musical modulation is slight, rely on contrasts, not of duration, but of intensity, to secure rhythm. Such languages are the Northern European. But even Italian accent is not entirely musical, but only partly so. It represents a combination of the two.

In English the accentual basis is used, but compare

Should auld acquaintance be forgot,  
And never brought to min' ?  
Should auld acquaintance be forgot,  
And auld lang syne ?

with

It is an ancient Mariner,  
And he stoppeth one of three,  
"By thy long gray beard and glittering eye,  
Now wherefore stopp'st thou me ?"

<sup>1</sup> Post-biblical poetry of the Middle Ages and later was written on what became a stress-accent basis, as was much of the contemporary Latin poetry of the monasteries. Hebrew poetry passed through an intermediate stage of counting syllables. The Kalirian poetry, which relied on rhymes and refrains much as did mediaeval French poetry, was only a temporary development, although the rhyme united to the syllable count later gave stress-accent meter.

The syllable-count poetry written under Arabic influence had a sounded *sh<sup>h</sup>wā<sup>2</sup>* occurring in places. Perhaps the finest example of this is 'ĕli *çiyyon*. Under Italian influence the poetry did not develop the introduction of each structure by a *sh<sup>h</sup>wā<sup>2</sup>*. Ordinarily *sh<sup>h</sup>wā<sup>2</sup>* was not counted as a syllable, but was, in fact, treated as cyclic. The later poetry of the syllable count has the word-accent agreeing largely with an iambic meter.

It is strange that the change from the ancient basis, which appealed to the ear, to the stress-accent basis took place at this time in almost all poetries. Some poetries went through an intermediate stage of counting syllables—a stage out of which, for certain reasons, French never passed. Perhaps the change was due to the loss of the mora basis when poems began to be read rather than recited, and the replacement of the musical accent by its barest form—the stress accent.

The same change, occurring in the same way, took place in Sanskrit from the ancient to the modern. The pronunciation of Sanskrit by modern Hindus is mainly an ictus-accent, that is, a variation of stress.

For a comparison of the two bases in Greek see the first lines of the *Odyssey* and the same lines in a modern Greek translation in Goodwin, *Greek Grammar*, p. 349. This is an excellent contrast, in which the modern version sounds very much like lines from *Evangeline*, because, although in our reading of the ancient *Odyssey* the mora is lost, one of its integral parts, the pause, has remained.

The change in English poetry from the basis which appealed to the ear (alliteration) followed the same general tendency, but a stress accent seems to have been a characteristic

The first, even when read and not sung, retains to some extent its quantitative character because of its musical association, and its rhythm, when it is recited, is partly due to contrasts of duration. The second example shows a rhythm due to alternation of greater and less intensities. In Homer a similar condition sometimes holds true, in that some lines, because of their meaning, do not lend themselves to quantitative rhythm, but partake more of an accentual character.<sup>1</sup>

For the greater part Latin and Greek poetry use *morae*. We, from association with English poetry, read it as accentual. English poetry uses stress accent; we sometimes read it as using *morae*. In general a Latin verse is a uniform arrangement of long and short syllables. The more common Latin foot is of two kinds, a three-mora foot and a four-mora foot. A three-mora foot, as in Hebrew meter, can be cast into iambs and trochees; a four-mora foot into anapaests, amphibrachs, or dactyls.<sup>2</sup> In a verse, however, the number of *morae* and their arrangement are predominately of one kind. This gives the name to the meter.

Hebrew prosody differs fundamentally from classical prosody. No poem is written according to a repeating meter scheme. The rhythm of Hebrew poetry depends, not on the relative position of the prominent syllable with respect to the surrounding syllables, but on a certain relative position of the important syllable in the verse. Classical verse, comparatively, is mechanical; Hebrew verse is dynamic. Furthermore the prominent syllable in Hebrew is the normally accented syllable, and its importance is marked by giving it greater duration.<sup>3</sup> Hebrew meter employs the combination of the

of Anglo-Saxon poetry. The syllable count was grafted on the already present stress-accent rhythm through the influence of Anglo-Norman poetry. The tendency in English poetry, except for occasional lapses, has been toward a freedom from the mechanical syllable arrangement.

<sup>1</sup> Cf. *infra*, p. 38, n. 3.

<sup>2</sup> In Latin, when a syllable is the only one in the foot, it may even be considered to have four *morae*.

Admoni tu coepi fortior esse tuo.—Ovid.

<sup>3</sup> That it is the accented syllable that has the duration and not a long syllable is important. It has been shown that the early metrical beat in Plautus and Terence in early Latin poetry coincided closely with the ordinary accentuation in the Latin sentence. This was during the borrowing stage, when Greek prosody was being introduced. But is it not possible that Greek poetry went through a similar stage, a stage which Hebrew poetry did not pass out of, since the nature of the language did not permit long and short syllable contrasts to be developed, but which in the case of Hebrew poetry developed highly?

mora basis of poetry and the accent. It is based on the number of morae as determined by the accented syllable.<sup>1</sup>

This arrangement gives rise to a type of rhythm which, as in the case of all poetic rhythm, is not characterized by a temporal regularity between its elements. It was mentioned above that the arrangement of syllables of one and two morae does not hold to a fixed metrical scheme. The similar condition in the *āryā* foot is a quite adequate comparison. Certain of the Pindaric odes are also comparable.<sup>2</sup> The variation of measures of a different number of morae is quite free in Hebrew poetry. The comparison with *āryā* meter is instructive, but the alternation in the latter is not so extensive. In the variation of measures Hebrew poetry resembles more the mixed measures in Latin or Greek poetry.<sup>3</sup>

#### THE RHYTHM OF HEBREW POETRY

The type of rhythm found in Hebrew poetry does not differ from that found in the poetry of any other language. It arises out of an arrangement of feet in which there is no repetition of identical or temporally regular elements. This irregularity is a fundamental characteristic of the artistic rhythm form, and in this respect the nature of rhythm, especially of that in poetry, has been obscured by the "metricists," who insisted on a mathematical equality between the feet of a verse and a separation into equal bars. Their point of view, however, superseded the teaching of the "rhythmic," which took some account of language rhythm because it was the current view in later classical times, and because the Byzantine and Italian scholars found it more useful for their purpose

<sup>1</sup> The translation of the *Odyssey* by Livius Andronicus, a Greek slave who was familiar with Greek prosody, into Saturnian verse would indicate that he identified the long syllable of the Greek foot with the accented syllable of the Saturnian meter. Such an identification he must have made in order to write in the meter with which he was familiar, with the necessary modifications for the Saturnian verse. And this was possibly the basis of the Saturnian meter, in which, as in Hebrew, the accented syllable had two morae, the unaccented syllable one.

Saturnian verse resembles Hebrew poetry in yet other respects. Apparently the "word-foot" unit (see *infra*) prevailed, and the line usually consisted of two members of three beats each, and was divided by a caesura. Frequently the ratio was 3:2, an arrangement which resembled the *ḵināh* meter.

<sup>2</sup> Sir J. E. Sandys, *The Odes of Pindar* (1915), p. xxxiv, and the odes referred to.

<sup>3</sup> Cf. Goodell, *Chapters on Greek Metric* (1901), p. 240.

and more convenient.<sup>1</sup> For these reasons a system of prosody based on rigid metric forms became the only method of analysis.

From an approach such as this the objective irregularity of Hebrew poetry presented an insuperable obstacle—not entirely insuperable, because some decided that since regular scansion was the proper arrangement the Hebrew in Hebrew poetry was incorrect, and set about to correct it. But the type of rhythm found in Hebrew poetry is unlike that of other poetries only in its objective form.

Recent experimental studies in rhythm have shown that rhythm, especially the rhythm of poetry, is not characterized by an objective regularity in the recurrence of its elements. Wallin<sup>2</sup> found that “there were various qualities or degrees of speech rhythm, and that the advocate of the time theory was incorrect in so far as he insisted on absolute periodicity as the *sine qua non* of rhythm.”<sup>3</sup> “When the deviation rises to a fraction of 15 per cent of the length of the whole interval, the mind finds it hard to rhythmize the impressions; when the fraction is 12 per cent the rhythm is still a little vague; and when it is 7 per cent the intervals are easily co-ordinated.”<sup>4</sup>

MacDougall states: “The artistic rhythm form cannot be defined as constituted of periods which are ‘chronometrically proportionate’ or mathematically simple.”<sup>5</sup> His next statement is significant in its relation to regular verse. “It is not such in virtue of any physical relations which may obtain among its constituents, though it may be dependent on such conditions in consequence of the subordination to physical laws of the organic activities of the human individual.”<sup>6</sup> The variation present in rhythm is not only in the time value of the elements, but also in their form. “There is properly no repetition of identical sequences in rhythm. Practically no rhythm to which the aesthetic subject gives expression, or which he apprehends in a series of stimulations, is constituted of the unvaried repetition of a single elementary form.”<sup>7</sup>

<sup>1</sup> *Ibid.*, p. 14.

<sup>2</sup> Wallin, “Experimental Studies of Rhythm and Time,” *Psych. Rev.*, XVIII (March, 1911).

<sup>3</sup> *Ibid.*, p. 100.

<sup>4</sup> Wallin, “Researches on the Rhythm of Speech,” *Yale Psych. St.*, IX (1901), 70, of part of the experiments of which the first statement is a summary.

<sup>5</sup> MacDougall, “The Structure of Simple Rhythm Forms,” *Monog. Suppl. Psych. Rev.*, IV (1903).

<sup>6</sup> *Ibid.*, p. 310.

<sup>7</sup> *Ibid.*, p. 319.

According to Patterson rhythm arises from the "sense of swing." "Elasticity—that is, acceleration followed by compensative retarding, a tightening of speed, as it were, followed by an untightening, is the secret of a measuring scale for rhythmic experience."<sup>1</sup>

Brown found that in no case (except in nonsense verse) is there an approximate equality of feet.<sup>2</sup>

Time not only fails to account for the regularity of verse rhythm: it also fails to offer a base of distinction between different types of rhythm. Temporally anapaests are just like dactyls, and neither clearly distinguished from iambs. Here the concept of number comes to the rescue only to be followed by unwelcome consequences, and the most satisfactory course is to fall back on the swing of the rhythm itself. The different rhythms form distinct kinds of cycles. It is the perseverance of one of these types throughout a verse or stanza that establishes the rhythm. Each beat, or each swing, brings up another of the same general structure and the same total affective value.<sup>3</sup>

The theory of the Greek metricists called for a mathematical arrangement in which syllables had certain values. Syllables were deemed long or short; a long syllable was equal to two short syllables. Some even went farther and affirmed that a single consonant required half the time of a short vowel, and that two consonants or a double consonant required the same time as a short vowel.<sup>4</sup> It would seem, however, that the metrical arrangements of the classical prosodists were a method of study with a measuring apparatus rather than a system of laws of prosody. They were hardly more than a means of classification and recognition, for it is undoubtedly true that in the writing of poetry the rhythmic swing of the first few lines determines the rhythm structure of a poem. Yet the metricists were led to construct their theory from the poetry as they found it.

If there is an illusion of temporal regularity its cause ought to be known. Some other kind of regularity in the verse might give rise to the illusion. That there is some kind of regularity cannot be doubted after considering the fact that intricate verse rhythms can be repeated indefinitely in almost identical form. Other motor performances cannot be so accurately reproduced, and the words themselves which are employed are not of unvariable

<sup>1</sup> Patterson, *The Rhythm of Prose* (1916), p. 47.

<sup>2</sup> Warner Brown, "Time in English Verse Rhythm," *Arch. of Psych.*, No. 10 (1908), p. 44.

<sup>3</sup> *Ibid.*, p. 76.

<sup>4</sup> Goodell, *op. cit.*, p. 9.

duration. The rhythm itself is undoubtedly responsible for this fixity or stability of the verses. But not a time rhythm. If the feeling of rhythm arises out of a series of motor performances of alternate vigor and relaxation, the illusion of equality in time would very naturally arise from the apparent equivalence of these series. Objectively they could differ in time very considerably and still be felt as equal on account of the real equality, not of time, but of kind, between the two elements. . . . The regularity of the motor performance and the equivalence of the resulting feelings lead naturally to the introduction of the impression of temporal regularity; but that impression is really subsequent to the rhythm itself.<sup>1</sup>

The regularity in rhythm as we perceive it is due to definite cycles. These differ for different rhythms, and the recurrence of one type of these establishes a particular rhythm. In Hebrew poetry it is the word that is identified with the unit of rhythm, the foot, in what I have called the "word-foot," which will be described later. But at this point we may tentatively identify the word in Hebrew poetry with a shorter cycle and the verse with a longer cycle.

Longer cycles may be made up of a number of smaller ones, and as the possible length of any given cycle is undoubtedly controlled within certain physiological limits, it is clear that the time occupied by any five of them, say, will be fairly constant, even though the separate cycles vary considerably in duration. The more complex the movement that must be performed in a cycle of any particular form the more the duration of such cycles will vary. The movements of speech are extremely complex, and the results show, as we should expect, a very large difference in the amounts of time occupied by them. The inequality is still further augmented by the mental weighting of the syllables with greater or less meaning according to their logical and grammatical importance. Such weighting seems to increase the strain attaching to the larger or heavier points of the cycle and at the same time complicates the total situation in such a way as to lengthen the time occupied by that cycle in which it occurs.<sup>2</sup>

The verse may be considered the unit of larger rhythm. The classical foot as the classical prosodists knew it was hardly more than a formal division of the verse. Even in English poetry "in many cases the verse seems to be divided into short phrases rather than 'feet' in the ordinary sense. These phrases might be considered as the rhythmic elements in the verse, for they are fairly uniform in length, while the feet are far less regular."<sup>3</sup>

<sup>1</sup> Brown, *op. cit.*, pp. 76, 77.

<sup>2</sup> *Ibid.*, p. 75.

<sup>3</sup> *Ibid.*, p. 51.

The primary rhythm within the verse, which is usually ascribed to the foot, uses, I think, quite another basis. In dynamic poetries such as Hebrew (quantitative) and Anglo-Saxon (accentual) it is best to consider as the basis of primary rhythm, whether of time or of stress, the integral unit. This unit of primary rhythm may be differentiated (Latin and Greek), or scansion may take the form of counting syllables (French). The unit can be arranged in groupings, and these in larger groupings. In Hebrew the primary unit of rhythm is a time unit, and is the *mora*.<sup>1</sup> In the case of the "word-foot" they are grouped together, and between every two feet a slight caesura occurs.

The whole group of elements constituting the rhythmic unit is present to consciousness as a single experience; the first of its elements has never fallen out of consciousness before the final member appears, and the awareness of intensive differences and temporal segregation is as immediate a fact of sensory apprehension as is the perception of the musical qualities of the sounds themselves.<sup>2</sup>

The highly rhythmic nature of Hebrew poetry with the attendant irregularity between the feet of the verse presents an example of poetry in which the nature of poetic rhythm is objectively represented. It will be seen that for certain reasons the writers of Hebrew poetry were forced to recognize the non-regular nature of rhythm. Those, therefore, who attempted to construct a system of Hebrew meter according to classical standards could not but fail, and their attempts at forcing Hebrew poetry into these forms were unnecessary.

#### APPLICATIONS OF *ʔathnāḥ* METER

Before discussing the reason for the non-temporal regularity of Hebrew meter a few applications of *ʔathnāḥ* meter to various portions of Hebrew poetry will show the form that the metric arrangement takes. Three fundamental principles may be observed as underlying the meter of Hebrew poetry: (1) the unit of rhythm in the verse is the "word-foot,"<sup>3</sup> (2) the "word-foot" may vary in

<sup>1</sup> In a later study (Brown, "Temporal and Accentual Rhythm," *Psych. Rev.*, XVIII, 344) rhythm is said to be primarily temporal, although " . . . at the same time such a rhythm will also be accentual, since there must always be points of emphasis whose return can be marked."

<sup>2</sup> MacDougall, *op. cit.*, p. 322.

<sup>3</sup> See *infra*, p. 41.

length from three to five morae, and (3) the feet in the verse are not temporally regular. It must not be thought, however, that the variation is very great or very extensive.<sup>1</sup> The varying lengths of the feet are within such limits as to give an impression of regularity. If there is a general similarity and the time intervals vary not too greatly, the rhythm will carry itself, and the impression of equality will follow. "The regularity of the motor performance and the equivalence of the resulting feelings lead naturally to the introduction of the impression of temporal regularity; but that impression is really subsequent to the rhythm itself."<sup>2</sup>

In this connection MacDougall says:

Variation in the number of elements which enter into the rhythmic unit does not affect the sense of equivalence between successive groups so long as the numerical increase does not reach a point at which it lessens the definiteness of the unit itself. . . . The sense of equivalence has fallen off at five and practically disappears at seven beats.

Likewise the introduction of variations in the figure of the group—that is, in the number of elements which enter into groups to be compared, the distribution of time values within them, the position of accents, rests, and the like—does not in any way affect the sense of equivalence between the unlike units. Against a group of two, three, four, or even five elements may be balanced a syncopated measure which contains but one constituent, with the sense of full rhythmical equivalence in the functional values of the two types.<sup>3</sup>

It is not in Hebrew poetry only, however, that an objective temporal regularity is absent. The same condition holds true in Greek poetry, although not to so great an extent.

This theory [of irrational feet] throws overboard the doctrine of equality between the feet. Yes; but no more completely than Aristoxenus does by his doctrine—unquestionably sound—of the irrational syllable. . . . Limits were strictly drawn beyond which poet or singer could not go and did not desire to go—as distinctly as with the modern poet and modern singer. In such mixed kola unity was maintained by equality between theses; arses might vary between the limits fixed for irrational syllables, that is, between the length of a thesis and that of half a thesis.<sup>4</sup>

<sup>1</sup> See Appendix.

<sup>2</sup> Brown, "Time in English Verse Rhythm," *Arch. of Psych.*, No. 10 (1908), p. 77.

<sup>3</sup> MacDougall, *op. cit.*, pp. 348–49.

<sup>4</sup> Goodell, *op. cit.*, pp. 242–43.



An application of *ʔathnāḥ* meter to Hebrew poetry<sup>1</sup> will show the resolutions that the three and four morae take. It will also show the place of *sh<sup>e</sup>wā* and its effect in Hebrew meter. The significance of the scansion will be seen later.

AN APPLICATION TO PSALM 1<sup>2</sup>

ʔash<sup>e</sup>ré | ha<sup>e</sup>ish || ʔāshér | lo<sup>o</sup> ḥalākh || ba<sup>e</sup>ācāth | r<sup>e</sup>sha<sup>e</sup>im |  
 ubh<sup>e</sup>dhérek | ḥatta<sup>e</sup>im | lo<sup>o</sup> amādh || ubh<sup>e</sup>moshābh | le<sup>e</sup>im | lo<sup>o</sup> yashābh |  
 ki<sup>o</sup>im | b<sup>e</sup>thorāth | YHWH | hephcō || ubh<sup>e</sup>thó|rathó | yehgéh | yomām | walāylah |  
 w<sup>e</sup>hayāh | k<sup>e</sup>és | shathúl | al<sup>e</sup> pāl<sup>e</sup>ghe | māyim |  
 ʔāshér | pīr<sup>e</sup>yó | yittén | b<sup>e</sup>ittó || w<sup>e</sup>aléhu | lo<sup>o</sup> | yibból |  
 w<sup>e</sup>khól | ʔāshér | ya<sup>e</sup>āséh | yaqlī<sup>e</sup>h |  
 lo<sup>o</sup> | k<sup>e</sup>hen | har<sup>e</sup>sha<sup>e</sup>im | ki<sup>o</sup>im kammós | ʔāsher tidd<sup>e</sup>phénnu | rú<sup>e</sup>h |  
 al<sup>e</sup> kén | lo<sup>o</sup> yakūmu | r<sup>e</sup>sha<sup>e</sup>im | bammishpāt || w<sup>e</sup>hatta<sup>e</sup>im | ba<sup>e</sup>ādhāth | çaddikim |  
 ki<sup>o</sup> yodhéc | YHWH | dérek | çaddikim || w<sup>e</sup>dhérek | r<sup>e</sup>sha<sup>e</sup>im | to<sup>e</sup>bhédh |

In this psalm I have followed largely the accented syllable as laid down by Koenig,<sup>3</sup> where he indicates by certain rules which syllables can have the accent.

From the example of scansion given above it can be seen that sounded *sh<sup>e</sup>wā* is treated with its following syllable like the short syllable in the cyclic dactyl in Latin or Greek prosody, or rather as the cyclic anapaest—because of the nature of the Hebrew word.<sup>4</sup> The comparison is quite apt where the *sh<sup>e</sup>wā* precedes an accented syllable; a *pathah*-furtive is illustrative of the former case. The *sh<sup>e</sup>wā* is marked by the first of two half-circles joined, or by the half-circle joined to a macron. Where the *sh<sup>e</sup>wā* stands at the beginning of a foot it can be treated in several ways—all of which amount to the same thing, namely, that it is considered cyclic. Thus it can be represented by a pause (∧) plus the equivalent of a greater (composite *sh<sup>e</sup>wā*) or lesser part (simple *sh<sup>e</sup>wā*) of a mora, or if the

<sup>1</sup> For other applications see Appendix.

<sup>2</sup> Hebrew in this article is transliterated in accordance with the scheme outlined in Vol. I of the *Inter. Standard Bible Encyc.* The long marks are omitted in the scansion

<sup>3</sup> Koenig, *op. cit.*, p. 32.

<sup>4</sup> Cf. *σύμματος ἴσσο*.—Sapph. i. 28.

foot is not initial it might be considered that the preceding syllable is held. This does not involve the recognition of additional syllable lengths; the *shewā* with its preceding rest equals an unaccented unit. The simpler way, however, of treating initial *shewā*, and the way it is treated in the examples of scansion given, is in a case as *kēmō* (Job 31:37) of regarding it in a cyclic three-mora foot, as  $\cup -$ , for there is little difference in the time length of the last word of the preceding verse (Job 31:36) *lī* ( $-$ ), which has three morae, and *kēmō*.

Bellerman allowed no morae for *shewā* and *pathaḥ*-furtive. This disregard of *shewā* was properly criticized by Saalschütz. On the other hand *shewā* is not a full syllable. Grimme sought to place it by giving it one mora in his scale. Neither of these extremes, nor yet Grimme's attempt at a compromise, is satisfactory. The best treatment is to consider it cyclic. For when two syllables in Latin or Greek poetry come together in, for instance, a cyclic dactyl, the second syllable is shorter than the preceding syllable (so *pathaḥ*-furtive), as  $\int \int \int$ ; or in the cyclic anapaest, where the movement is forward, it is shorter than the following syllable, as  $\int \int \int$ . The first word of Ps. 1 is of the latter typical form, as *ʔashere* ( $\cup \cup -$ ).

In line 2*b*, *u-bhṭhōrāthō* if undivided has five morae. Feet of five morae occur in several places, as Exod. 15:17, *wṭṭā'ēmō*, or Lam. 2:15*b*, *l'khol-hā'āreḩ*. Frequently these cases are where two words are joined by a *maḳkeph* (1+4 or 2+3 morae).<sup>1</sup> Koenig would make *ʔal pal'ghē māyim*, 3*a*, one foot. The meter would indicate that it is two feet. As indicated, both this and the preceding verse have five feet to the line instead of four.<sup>2</sup>

#### THE NON-UNIFORM ARRANGEMENT OF HEBREW POETRY

The absence of rigid meter schemes in Hebrew poetry presents an interesting study in poetic form and in the adaptation of meter to thought. For the feeling of the poet is reflected in this meter more than in any other. The irregularity itself is due to three causes: (1) the poet often wrote under strong emotion, especially in lyrical forms; (2) the meter was adapted to the sense more extensively and

<sup>1</sup> Cf. Koenig, *op. cit.*, pp. 35 f. Sievers wishes to reduce these. According to this view feet of five morae would then be read in four-mora time.

<sup>2</sup> Cf. Koenig, *op. cit.*, p. 35.

more continuously than in almost any other language; (3) the word bore a close relation to the foot, because of the nature of word-formation. The first of these causes accounts for the often irregular lengths of the lines; the second explains variations in meter; the third explains variations in rhythm.

1. *Subjective element*.—The importance of the emotion under which the poet wrote as a factor in the non-temporal regularity of Hebrew poetry has not been overlooked. Indeed it was this element which was not incorrectly cited as the basis of the rhythm in Hebrew poetry.<sup>1</sup> In poems written under such conditions we expect to find, not only the highest thought, but also a high type of rhythm. The fact that the poet wrote under a strong emotion accounts largely for the often irregular lengths of the lines; the second and third aspects of the non-uniform arrangement of Hebrew poetry are also in part due to it. In fact, the poet relied on the subjective element to so great an extent that poems temporally regular could not result, and the true nature of rhythm gradually came into recognition.

2. *Sense-meter correspondence*.—The extensive adaptation of meter to sense which turns up in various forms in Hebrew poetry is an important element in its metric arrangement. No poem is written in a recurring meter, but changes from sentence to sentence, from word to word, as the thought changes.<sup>2</sup> The sense-meter adaptations, moreover, are not mere embellishments, but are necessary in the language. Those parts of Homer where the sense peculiarly fits the meter are immediately recognized, but they are *artistic* and the correspondence is not inherent in the language.<sup>3</sup> In Hebrew the relation is fundamental.

<sup>1</sup> Koenig, Budde, and others were quite right in basing the rhythm of Hebrew poetry on high thoughts and emotion, but, as pointed out in the introduction, this emotion must manifest itself according to certain principles.

<sup>2</sup> Cf. Koenig, *op. cit.*, p. 21.

<sup>3</sup> Two familiar examples are the description of the rapid and bounding descent of the stone,

αὐτίς ἔπειτα πέδονδε κυλίνδετο λᾶας ἀναιδής.—[*Od.* xi. 598].

and the imitation of stamping feet,

πολλά δ' ἄναντα κάταντα pápanτá τε δόχμιά τ' ἤλθον.—[*Il.* xxiii. 116].

An instance of more complex sense-meter-sound adaptation is in the *Iliad* i. 49:

δεινὴ δὲ κλαγγὴ 'γένετο' ἀργυρέοιο βιοῖο.

This could have been said in other ways; this way is artistic.

The sense-meter correspondences are very evident in the Book of Job. These correspondences are of three kinds: (1) of meaning, (2) of voice or gesture, (3) of sensuous effect. In Job 3:12,

*maddú<sup>sc</sup> | kidd<sup>m</sup>úni | bhirkáyim || umáh | shadháyim | ki | ʔínák |*,

three amphibrachs ask the main part of the question. This is voice-meter correspondence. The Song of Songs abounds in these.

In Judg. 5:22 the description in the Song of Deborah,

*middahăróth | dahăróth | ʔabbiráw |*,

of the headlong, breathless flight of the war horses falls into anapaestic effects.<sup>1</sup> This is an example of correspondence between meter and sensuous effect. Another example of this is in Ps. 93:4,

*mikkolóth | mayim | rabbím || ʔaddirim | mishb<sup>er</sup>é | yam |*.

“Above the thunder of the vast, mighty waters, breakers of the sea.”<sup>2</sup>

The imprecation meter, trochaic in effect, is used in Job 3:3,

*yóbbhadh | yom | ʔiwwáledh | bo || w<sup>h</sup>álláylah | ʔámar | hórāh | ghábher.<sup>3</sup>*

It is used to express a denunciation. It is an example of meaning-meter correspondence.

An example where the three are combined, and in addition where various kinds of feet are used, is in the next verse, Job 3:4. The

<sup>1</sup> Cf. E. G. King, *Early Religious Poetry of the Hebrews* (1911), p. 9. A comparison can be made with one or two lines of Browning's "How They Brought the Good News from Ghent to Aix,"

"And into the midnight we galloped abreast."

The comparison is not complete because the Hebrew words suggest the scene of battle desolation, the furious dashing of the riders, and the sound of the hoofs of the horses. Hebrew poetry would, however, never permit a whole poem to be written in one rhythm.

<sup>2</sup> I have not changed this line from the text. See a possible emendation in Kittel, *Biblia Hebraica*.

<sup>3</sup> Cf. Browning's

"What? Those lesser thirds so plaintive, sixths  
diminished, sigh on sigh."—*A Toccata of Galuppi's*.

The most familiar example of this meter is probably,

"Double, double, toil and trouble,  
Fire burn, and caldron bubble."

The long vowels here make comparison easier. The reading of both aloud, as well as the Hebrew example, brings out the contrast between the Hebrew meter, which is based on morae, and the English meter, which is based on accent of stress.

first two words, *hayyōm hahū*<sup>2</sup>, are iambi. The pause gives the effect of Job pointing, as if the day were tangible. The next word introduces an imprecation again. The anapaestic effect of the latter part of the sentence amounts to a lowering of the hands. The meter is adapted to gesture.

The meter of Lamentations and of certain of the psalms, which has been referred to as the *kīnāh* meter, gives its peculiar effect largely through the use of meter forms with the accent on the end of the word in iambic or anapaestic feet. Other forms may be substituted, since the sense is of first import, as in Lam. 2:19, *kūmī ronni bhallaylāh*, "Arise, complain in the night," where trochaic or early-syllable accented words are used, because action is urged.

*Kīnāh* meter has usually been referred to as meter in a line where the beats were in a relation of 3:2. With Koenig<sup>1</sup> a more accurate characterization of *kīnāh* meter is: an arrangement of feet separated by a caesura, wherein the number of feet in the first member exceeds that of the second member. The more common use and the same peculiar effect of *kīnāh* meter can be found in Keats's "La Belle Dame sans Merci":

O what can ail thee, knight-at-arms,  
Alone and palely loitering?  
The sedge has withered from the lake,  
And no birds sing.

O what can ail thee, knight-at-arms,  
So haggard and so woebegone?  
The squirrel's granary is full,  
And the harvest's done.

But just as in Hebrew poetry it can be used in other ways, for instance, in lively descriptions:

I met a lady in the meads,  
Full beautiful—a faery's child;  
Her hair was long, her foot was light,  
And her eyes were wild.

And indeed objection has been made to calling this *kīnāh* meter<sup>2</sup> (although the more extensive use justifies the name), because it is

<sup>1</sup> Koenig, *op. cit.*, p. 54.

<sup>2</sup> B. Duhm, in *Encyc. Biblica*, art. "Poetical Literature."

used in songs of triumph as well, and the objection is well taken. The mourning effect of Lamentations is due to quite another cause.<sup>1</sup>

3. *The word-foot unit.*—The third cause of the non-uniform metrical arrangement of Hebrew poetry is bound up with certain peculiarities of the language itself. These peculiarities permit the identification of the word with the foot as the unit of rhythm. The first of them concerns the nature of the word and its formation. The word in Hebrew is comparatively short, and can usually be compassed in a three- or four-mora foot. There are two reasons for this condition: (1) the changes of the word, especially the verb, are largely internal changes; (2) Hebrew is not, to any extent, a compound-forming language.<sup>2</sup>

The other condition which aids the identification of the word with the foot is that the accent in Hebrew is usually on the ultima, sometimes on the penultima.<sup>3</sup> Thus the end of each foot makes a caesura

<sup>1</sup> The mourning effect of Lamentations is due partly to the *kināh* meter (3:2), partly to the predominant use of "rising feet," but mostly to the predominance of the long *ā* sound. Very little has been done in the field of the sensuous effect of sound in Hebrew poetry. A tentative treatment of it can be found in G. A. Smith, *Early Poetry of Israel*, pp. 2 f.; cf. also Gordon, *The Poets of the Old Testament* (1912), pp. 6 f.

In the first line of Lamentations there are 18 long *ā* sounds to a total of 33 vowel sounds. This ratio in other verses varies; sometimes another vowel sound is more important. Cf. the predominance of long *ā* sound in Lamentations with the taunt song in Isa. 14:4 f.; or Isa. 40:9-16; or with Ps. 42, which are also written in *kināh* meter. In these, however, there is an extensive use of other vowels or vowel combinations.

Where the pain in Lamentations is no longer of mourning, but grows lyric, long *ā* decreases and long *ī* and *ē* are more prominent. Lam. 1:16, 'al 'ēlleh 'ānī bhōkhiyyāh . . . has 19 long *ī* and *ē* sounds to a total of 39 vowel sounds, varying also around the ratio given above, 1:2. Cf. David's lament over Saul and Jonathan (II Sam. 1:19), although this partakes of the nature of a formal mourning; or the weeping for Absalom (II Sam. 19:1), where the ratio is 10:23; or Ps. 137. In these later examples the consonants as well as the kindred vowels play an important part, but this would lend itself to a fuller treatment.

Cf. with the mournful effect of Lamentations above the sprightly effect of the Song of Songs, which uses *o* and *a* vowels as well as *i* and *e*. The thanksgiving of David (II Sam., chap. 22; Ps. 18) shows that lyric pain and lyric joy are not very far apart.

<sup>2</sup> The rather few cases that may be considered compounds occurring in Hebrew still maintain the word-foot unit, inasmuch as the first part of the group loses its accent, and no part of the compound can be carried over in the next foot.

A compound-forming language, as are Latin and Greek, permits foot-units instead of word-units, and therefore there can be a regular beat because the compounds are distributed in as many feet as the long and short syllables require. In Sanskrit, where the compounds are often of absurd lengths, this is especially the case.

<sup>3</sup> *āthnāh* meter is especially appropriate in Hebrew poetry because of the late-syllable accent. This ultimate or penultimate accent gives the word a ponderosity which requires a pause, and so gives great dignity and repose—a further adaptation to thought.

A faint suggestion of this may be obtained from French poetry, since French poetry accents slightly on the last syllable, as in the sonnet beginning,

"Que ton visage est triste et ton front amaigri."

The compassionating effect here produced is due somewhat to the ending of a thought with nearly each foot.

of greater or less strength. The importance of this in the rhythm will be seen later. Under these conditions the *word-foot* unit arose in Hebrew poetry because (1) the meter is superimposed on the word, which, representing the sense, precedes the meter; (2) the accent is oftenest on the ultima; (3) most words can be compassed in a four-mora foot.

It is possible that the identification of the word with the foot had something to do with the recognition of the non-temporal regularity of poetic rhythm. The "foot" was probably not spoken of as such, but the presence of poetic forms in 3:3 beats or 2:2 beats would indicate that some kind of foot-unit was recognized. At this point may also be mentioned the reason for the variation of the meter form. It was the absence of long- and short-syllable contrasts, which, because of the nature of the word and its changes, did not develop. The recognition of the nature of poetic rhythm and its use objectively, although it underlies all poetry, led to a very different development in Hebrew poetry than would otherwise have taken place. One suggestion of such a possible development is given elsewhere.<sup>1</sup> The meter arrangement that did arise permitted the utmost attention to be given to thought and meaning, and allowed the rhythm to follow in their train.<sup>2</sup>

Realizing that Hebrew poetry regards the sense more than any formal arrangement, Koenig properly rejects Siever's "normally anapaestic" rhythm and his division of words and shifting of accents to attain it. It is of no import to the rhythm, he believes, whether the accent comes at the end, in the middle, or at the beginning of a

<sup>1</sup> *Vide infra*, p. 48.

<sup>2</sup> Meter irregularity itself is just as much a characteristic of English poetry as of Hebrew. Any virile language which is close to the people cannot brook in its poetry a rigid, stereotyped, metrical scheme. Later classical Latin and Greek, it must be remembered, were the languages of the few. Cf. Milton,

" 'If thou beest he—but oh, how fallen! how changed  
From him, who in the happy realms of light,  
Clothed with transcendent brightness, didst outshine  
Myriads, though bright!—' " [*Paradise Lost*, I, 84].

Browning,

"That's the appropriate country; there, man's thought  
Rarer, intenser,  
Self-gathered for an outbreak, as it ought,  
Chafes in the censer,"

and *passim*.

syllable group.<sup>1</sup> He is here groping toward a realization of the word-foot unit, and redivides Sievers'

into

*shāman* | *tā* °*ābhī* | *thā* *kāsī* | *thā*<sup>2</sup>

*shāmantā* | °*ābhīthā* | *kāsīthā* |

## CERTAIN REGULAR METERS

It has been noticed that certain poems and parts of poems can apparently be scanned as if they were written according to a repeating-meter scheme. That which led aside those who attempted to interpret Hebrew meter solely on a classical basis is the apparent regularity of the feet in some of the early poetry of the Bible. The Lament of Lamech<sup>3</sup> can be scanned with some regularity. Similarly the two lines and fragment sung on the occasion of the well giving forth water<sup>4</sup> can be so scanned. In the song over the early defeat of Moab,<sup>5</sup>

*bō*°*u* | *heshbōn* | *tibbanēh* | *w*°*thikkōnēn* | °*ir* | *ṣihōn* |  
*ki* °*ēsh* | *yaq*°*āh* | *me**heshbōn* || *leh**abhāh* | *mikkiryāth* | *ṣihōn* |  
°*akh*°*lāh* | °*ar* | *mo*°*ābh* || *ba*°*ālē* | *bamōth* | °*arnōn* |  
°*oy* | *l*°*khā* | *mo*°*ābh* || °*abhādhta* | °*am* | *k*°*mōsh* |  
*nathān* | *banāw* | *p*°*ēlēm* || *ubh*°*nothāw* | *bashsh*°*bhūth* | *l*°*mēlek*h | °*ēmori* | *ṣihōn* |,

the meter is quite comparable to an iambic, in part anapaestic hexameter, or, more closely, to the mixed measures in classical poetry.<sup>6</sup> Most of the parables of Balaam can be scanned almost

<sup>1</sup> Koenig, *op. cit.*, p. 39.

<sup>2</sup> Deut. 32:15; Sievers, *Studien zur hebräischen Metrik*, I, 144.

<sup>3</sup> Gen. 14:23.

<sup>4</sup> Num. 21:17.

<sup>5</sup> Num. 21:27.

<sup>6</sup> There was possibly among the earliest Hebrews an ode form of poetry composed in honor of a place or people, which in the case of the song on the early defeat of Moab consisted of six lines, the last line being a reinforcement of the theme.

Was it rhymed? The parallel structure is present, and the rhymed scheme, if not accidental, is:

<i>A</i>	<i>B</i>
<i>a</i>	<i>a</i>
<i>a</i>	<i>a</i>
<i>b</i>	<i>a</i>
<i>b</i>	<i>c</i>
<i>d</i>	<i>c</i>
	<i>a</i>

Some of these rhymes are merely a repetition of words or similarity of sounds. Other poems or fragments, however, seem to have a somewhat similar rhyme scheme. The first four structures of the Lament of Lamech are in conformity; the fragment of the song of the



regularly. Occasionally for some space the Book of Job can be scanned in like manner, and Cobb<sup>1</sup> points out that a parallel for every line in Ps. 54 can be found in English poetry.

These cases are not the result of conscious efforts to attain a repeating-meter scheme. They are only so when regarded from the classical viewpoint, or considered analogous to poetry using a stress-accent basis. The arrangement, as well as the number of morae, varies from foot to foot and from line to line. Lastly the irregularities which do occur render such a hypothesis untenable. As pointed out by Cobb<sup>2</sup> the poems which cannot be scanned according to a repeating meter greatly predominate. The attempts to reduce them to a stereotyped meter scheme necessitate the doing of violence to both text and accent. Some of the alterations introduced by various scholars may illustrate a metrical theory, but the resulting material is not Hebrew poetry. The arrangement of syllables has long since lost all semblance to Hebrew. The cases where the stress accent can be used with moderate success are simply cases where the poet lapsed into a half-meditative chant meter, as so often happens in Job.

#### THE RHYTHM OF THE VERSE

In the rhythm of Hebrew poetry two types of verse-units are fundamental, a verse of three feet and a verse of two feet. Longer lines are groupings of these in various arrangements. The *kīnāh* meter combines the two elementary verses in the relation of 3:2. Most of the early poetry is in the relation of 3:3. The Song of the Red Sea (Exod., chap. 15) is largely in the meter of 2:2. Prophetic poetry retains the two types of elementary verse, but does not employ them in the regular order which is found in the early poetry.

The rhythm of the verse is secured by the use of (1) morae, (2) caesuras, and (3) end-verse pauses. The caesuras play a very important part in the recitation of Hebrew poetry.<sup>3</sup> They sometimes

well (Num. 21:17) fits in in part, but it is in an incomplete form. Other examples are Lamech on Noah (Gen. 5:29), and the eulogy of David (I Sam. 18:7), in this respect similar. See what Smith (*op. cit.*, p. 24) says on rhyme. Cf. also Koenig (*op. cit.*, pp. 4 f.), where he examines the views of Grimme, Zapletal, Kittel, Kautzsch, but rejects rhyme as a characteristic of Hebrew poetry.

<sup>1</sup> Cobb, *A Criticism of Systems of Hebrew Metre*, p. 10.

<sup>2</sup> *Ibid.*, p. 30.

<sup>3</sup> Cf. Koenig, *op. cit.*, p. 36.

permit an unaccented syllable to be held longer than its two morae, much as a note is held in music. They contribute greatly to the facility by which the meter and mora changes are effected.<sup>1</sup> The caesuras at the end of the word-foot unit were early, although unconsciously, recognized, when the line was divided into a number of feet by counting the beats.<sup>2</sup> The regular forms of poetry were recognized by the same means. In some of the poetry of the Prophets, however, and in the lyrical forms the meaning did not lend itself to, nor did the emotional stress permit, a uniform number of feet in the line.<sup>3</sup> The Books of Lamentations and of Job show a more conscious workmanship, and in these the lines are to a great extent of a regular number of feet.

Not only because of the variation in the verse, but also because of irregular line lengths in Hebrew poetry, the difference between poetry and impassioned prose is not so great as in English.<sup>4</sup> Many parts of the biblical narrative Hebrew approach a poetical form, but they cannot be confused with poetry. The test of poetry is threefold: (1) elevated thought manifested in a straitened style, (2) use of the word-foot unit, (3) use of the verse-thought unit. The first has regard to content, the second and third pertain to structure. Doubt is often expressed as to whether certain portions of the biblical Hebrew are poetry or not. Terms such as *mizmōr* and *shīr*, which are prefixed to some of the psalms, need not deter us, since these designations are not found in connection with those forms about which there is doubt. Furthermore, a test should be purely objective, and the conclusion should be reached after an examination of the content, not through a classificatory term. A question has been raised as to whether the tale of the woman of Tekoa (II Sam. 14:5 f.) is poetry.

*Elevated thought manifested in a straitened style.*—This presents a difficult problem because the material is not lyric, but simple (not epic) narrative. But verse 6, which is vivid description, presents a

<sup>1</sup> Cf. Job 3:4, mentioned above.

<sup>2</sup> For the number of feet in the various forms of poetry cf. E. G. King, *Early Religious Poetry of the Hebrews*, where he attempts to reproduce the rhythm in translation.

<sup>3</sup> Cf. Koenig, pp. 19 and 20.

<sup>4</sup> Cf. such anomalous forms in English poetry as "Ossian" by James MacPherson.

terse style. This style begins again with the words of the family, verse 7, and continues through this verse. In the rest of her speech it is not present to any great extent. Upon analysis, however, the style shows simply an arrangement of short words for the greater part of three morae. The movement seems to be the rhythm of sing-song rather than the rhythm of poetry.

*Word-foot unit.*—This is a characteristic, but not always a test, of Hebrew poetry. It is the word-foot unit that makes Hebrew poetry similar to impassioned prose, and except for the first and third qualifications would make the distinction between the two forms of literature (between which distinction is often formal rather than real) difficult. But the word-foot unit preserves a certain rhythm, which arises out of the variation in the verse, of feet of three and four morae. This rhythm, though difficult of analysis, is the real rhythm of the verse. The speech of the woman of Tekoa is not characterized by this higher rhythm. Most of the feet in it are in meter forms in which the accent is on the end of the word, from which there arises an impression of regularity, and so of poetry. But the variation in the number of morae from foot to foot which does occur is greater than that found in the higher poetical forms, in the latter of which the changes are less frequent and the transitions even. For from the latter the impression of regularity arises out of a feeling of equivalence due, not to a regular relative placing of the beat, but to the thought of the elements.

*Verse-thought unit.*—It is this last characteristic that is largely observed that made the classification of this speech doubtful. Why it should be observed is not clear unless, as suggested by the meter forms used, a sing-song was purposely sought. In conclusion we may say that this speech is not poetry, although there are present in it some of the characteristics of poetry.

In like manner the fable of Jotham (Judg. 9:8) will be found to be of a similar nature. These examples may be considered to be an inferior form of poetry, but it is better to regard them as prose observing a stated verse-thought unit. The first lines of Job do not even observe the verse-thought unit; they are clearly not poetry. A further indication of Hebrew poetry, though not always, is parallelism. This is for other reasons, which cannot be treated here.

## PERIODS OF HEBREW POETRY

From the foregoing study of Hebrew meter certain periods of Hebrew poetry may be differentiated. A development is discernible in them which may be characterized as a movement away from a strict regard to form to the freer movement of prose. The early poetry is marked by some regularity in its beat; its similarity to classical poetry in this respect was pointed out. The later poetry, according to certain changes which took place in it, may be further divided into two periods. Although the three periods of Hebrew poetry can be clearly marked out with short transitions between them, it is better to regard them as stages in a development, which, in fact, they were.

The first period embraces some of the sporadic examples of poetry found in the early books of the Bible, and extends to the reign of David, including some of the early Davidic psalms. It is characterized by a vigorous folk poetry—often lyrical, with metrical feet of three morae predominating, and great regularity of beat. The verses are short, very distinct, and of a uniform length. The accent is for the greater part on the ultima, and the word-foot units are similar in their form. The resulting rhythm, although vigorous, is often rude and abrupt. The prayer of Hannah (I Sam. 2:1-10) is typical of this period. In it are great power and elemental strength, which arise from the shortness of the foot and the regularity of the beat. The thought is so direct that the poetry often lacks smoothness. The figures of speech are likewise direct and even primitive; the more subtle literary devices are not used.

The early examples of this period are the Lament of Lamech (Gen. 4:23), and even comparable to it the song on the early defeat of Moab (Num. 21:27). The Great Ode (Deut., chap. 32) and the blessing of Moses (Deut., chap. 33) show the marks of this period, but in them is discernible a greater dignity through a more evident restraint. This is manifested in a movement away from the three-mora foot, not to any great extent, however, but not from the defined, short verse and rather regular beat. The riddle of Samson (Judg. 14:14) and the answer and Samson's retort (Judg. 14:18) are very regular both in the form of the metrical feet and in their

length. One of the later examples is David's psalm on his deliverance (II Sam., chap. 22; Ps. 18), and in it certain tendencies are observable. There is a freer variation of three- and four-mora feet; the beat no longer comes with such regularity, and the regular verse arrangement is broken occasionally by the *kīnāh* meter. The Song of Deborah (Judg., chap. 5) from metrical evidence would not seem to be as early as it is usually considered to be. The predominant three-mora foot in early Hebrew poetry, coupled with the regular beat, suggests that Hebrew poetry might have developed a quantitative, regular meter similar to the classical. It was prevented from doing this, not only by the form of the language, but also by the guiding theme of the poetry, which soon came to the front.

The second period extends from the inauguration of the kingdom to the rise of prophetic literature. It is characterized by the growth of the lyric, which was developed as a definite poetical form, and which reached its highest point in this period. Great freedom of movement displaced the monotonous line, and the constrained poetical form gave way to forms in which there was not only metrical variation, but in which the foot often took on some complexity. The transition was marked by attempts at acrostics, in which naturally the short verse is retained, as in Pss. 111 and 112, for in the first period one would hardly look for acrostics. The psalm attributed to David, when he was driven away from Abimelech (applying this as superscription to Ps. 34), in spite of its time placement, would seem to be well in the second period. In Ps. 30, the song of dedication, are found the distinguishing marks of this period, a higher rhythm of the accent in the line rather than of the stress in the foot, some variation of line length, and a highly subjective character. The Song of Songs, whatever its original nature, although it differs greatly in matter from the poetry of the next period, shows a freedom of movement which suggests what the metrical form of the next period will be.

A type of poetry which, while it was an offshoot of that of the second period, yet influenced that of the third period to some extent, was the gnomic poetry. It has a freedom of movement which the early lyric did not possess, and a metrical form which is quite characteristic of the later lyric. Although it raises other questions, the

Book of Job, if it were not for its many unusual constructions and forms, could without hesitation be placed at the end of the second period.

The third and last period of biblical Hebrew poetry starts with the rise of prophetic literature. The form of the poetry is a development of the lyric, although the lyric as such remained, since its culmination as to form was in the second period. The later lyric, however, as shown in the group of *shîr hamma'âloth* psalms, differs from the lyric of the second period in a serener and perhaps maturer outlook. It has a repose and, even in the psalms which ask for restoration, a security of faith which contrast greatly with the unrest and striving after something seemingly unattainable in the early Davidic psalms. In the latter the ones expressing the greatest repose, although not contentment, are Pss. 18 and 34, and they do this as much by a measured regularity of the verse as by their thought. One difference in the meter of some of the early psalms is the large number of cyclic feet as compared with the later psalms and the Prophets. This is due partly to the more sparing use of the *waw* consecutive in the poetry of the latter. The keynote of the third period, however, as evidenced in the prophetic literature, is the exaltation of content over form. A meter, as *kînâh* meter (3:2), may be used, or the poetical form may be so free as to be prose-like. If the *kînâh* meter is employed, the form of the ratio is often complex. The introduction to a prophecy, if of a poetical nature, may be in the more constrained or lower form of poetry, and the prophecy itself in the freer form. The meter is as variable as the thought itself.

The first period of Hebrew poetry is the period suited for the war-song; in the second the lyric culminated; the third is no longer the period of the mere subjective lyric, but in it what might be called the "lyric of peoples" is found. It is no longer *šal'î um'çûdhâthî um'phaltî lî*, but *ʔēkhāh yāsh'bhāh bhādhādh hā'îr rabbāthî ʿām*. These are the three periods of Hebrew poetry.

Whether, even with a knowledge of the basis of Hebrew poetry, such poems as are found in the Bible will soon be written is doubtful. High emotion is more important than a knowledge of prosody,

especially in the case of biblical meter. These poems, therefore, alone remain to us as they have been handed down, but an understanding of the nature of their rhythm is important in the understanding of the poems themselves.

## APPENDIX

## PSALM 75

*h*odh*h*inu | *l*<sup>◌</sup>*k*h<sup>◌</sup>*á* || <sup>◌</sup>*ē*loh*im* | *h*odh*h*inu || *w*<sup>◌</sup>*k*arō*b*h | *sh*<sup>◌</sup>*m*ēkh<sup>◌</sup> || *š*ipp*er*ū |  
*n*iphl<sup>◌</sup>*oth*<sup>◌</sup>*ē*k<sup>◌</sup>h<sup>◌</sup> |  
*k*i | <sup>◌</sup>*ē*kk*ā*h | *m*o<sup>◌</sup>*ē*d<sup>◌</sup>h || <sup>◌</sup>*ā*n<sup>◌</sup>*i* | *m*esha*r*im | <sup>◌</sup>*esh*pōt |  
*n*<sup>◌</sup>*m*oghim | <sup>◌</sup>*ē*reš | *w*<sup>◌</sup>*k*hol *y*osh<sup>◌</sup>*b*hēh<sup>◌</sup> || <sup>◌</sup>*a*nok*h*i | *th*ik*ā*nti | <sup>◌</sup>*a*mmudhēh |  
<sup>◌</sup>*a*mārti | *l*ahol<sup>◌</sup>*l*im | <sup>◌</sup>*a*l *t*ahōllu || *w*<sup>◌</sup>*lar*<sup>◌</sup>*sha*<sup>◌</sup>*im* | <sup>◌</sup>*a*l *t*arimu | *k*āren |  
<sup>◌</sup>*a*l *t*arimu | *l*ammarōm | *k*arn<sup>◌</sup>*k*hēm || *t*<sup>◌</sup>*d*habb<sup>◌</sup>*er*ū | *b*h<sup>◌</sup>*ṣ*aww<sup>◌</sup>*ā*r | <sup>◌</sup>*a*thāk |  
*k*i *l*ō | *m*immoṣ*ā* | *u*mimma<sup>◌</sup>*ā*rāb<sup>◌</sup>h || *w*<sup>◌</sup>*l*ō | *m*immidhbār | *h*arim |  
*k*i | <sup>◌</sup>*ē*loh*im* | *sh*ophēt || *z*eh *y*ashpūl | *w*<sup>◌</sup>*z*ēh | *y*arim |  
*k*i *k*hōš | *b*<sup>◌</sup>*y*ādh | *YHWH* || *w*<sup>◌</sup>*y*āyin | *h*amār | *ma*le<sup>◌</sup> *m*ēṣekh  
*w*ayyaggēr | *m*izzēh | <sup>◌</sup>*a*kh | *sh*<sup>◌</sup>*m*arēh<sup>◌</sup> || *y*imṣū | *y*istū | *k*ol *r*ish<sup>◌</sup>*ṣ*e | <sup>◌</sup>*ā*reš |  
*w*<sup>◌</sup>*ā*n<sup>◌</sup>*i* | <sup>◌</sup>*a*ggidh | *l*<sup>◌</sup>*ol**ām* || <sup>◌</sup>*ā*zamm<sup>◌</sup>*r*āh | *l*<sup>◌</sup>*ol*hē | *y*<sup>◌</sup>*ā*kōb<sup>◌</sup>h |  
*w*<sup>◌</sup>*k*hol *k*arēnē | *r*<sup>◌</sup>*sha*<sup>◌</sup>*im* | <sup>◌</sup>*ā*ghaddē<sup>◌</sup> || *t*<sup>◌</sup>*er*omāmnah | *k*arēnōth | *ṣ*addūk |

There is a relatively large number of feet of five morae in Ps. 75, to which its slow movement is in part due.

When analyzed according to the number of morae in the feet of the verse, Ps. 75 presents the following scheme:

(1)	4	3	3	4	3	3	3	5
(2)	3	3	3		3	4	3	
(3)	3	3	5		4	4	5	
(4)	4	4	5		4	5	3	
(5)	5	4	3		3	3	3	
(6)	3	4	5		3	4	3	
(7)	3	3	3		4	3	3	
(8)	3	3	3		3	3	5	
(9)	4	3	3	4	3	3	4	3
(10)	3	3	3		3	4	3	
(11)	4	3	3		4	3	3	

Certain types of half-verses can be classified. The variation is very regular. Compare lines 1 and 9, which are almost identical.

## PSALM 150

*hal'lu Yáh |*

*hal'lu ʔél | b'kadshó || hal'lúhu | birkí<sup>ac</sup> | ʕuzzó |*  
*hal'lúhu | bhighbhú|rotháw || hal'lúhu | k'róbh | gudh'ló |*  
*hal'lúhu | b'théka<sup>c</sup> | shophár || hal'lúhu | b'enébbel | w'khinnór |*  
*hal'lúhu | bh'thóph | umahól || hal'lúhu | b'minním | w'cughábh |*  
*hal'lúhu | b'çilç'lé | sháma<sup>c</sup> || hal'lúhu | b'çilç'lé | th'úsah |*  
*kol hann'shamah | t'hallel Yáh |*

*hal'lu Yáh |*

## PSALM 130

*mimma'āmakīm | k'ra'ṭhikha | YHWH || ʔādhonáy | shim'áh | bh'kolí |*  
*tih'yénah | ʔaznékha | kashshubhóth || l'kol | taḥānunáy |*  
*ʔim | ʕwónóth | tish'már | Yáh || ʔādhonáy | mi | ya'āmódh |*  
*ki | ʕimm'khá | haṣṣ'liháh || l'má'an | tiwwar' |*  
*kiwwithi | YHWH || kiww'tháh | naph'shí || w'lidh'bháro | hoḥal'ti |*  
*naph'shí | la'dhonáy | mishshom'rim | labbóker | shom'rim | labbóker |*  
*yahél | yisra'él | ʔel YHWH || ki ʕim | YHWH | haḥé'sedh || w'harbéh | ʕimmó*  
*ph'dúth |*  
*w'hú | yiphdéh | ʔeth yisra'él || mikkól | ʕwónotháw |*

## THE ARRANGEMENT OF MORAE IN PSALM 130

(1)	5	4	3		3	3	3	21
(2)	4	4	4		3	4		19
(3)	3	3	3	3	3	3	3	21
(4)	3	3	4		3	4		17
(5)	4	3	3	3	4	4		21
(6)	3	4	4	4	3	4		(22)
(7)	3	4	4		3	3	4	21
					3	3	3	
(8)	3	3	5		3	4		18



In the right-hand column is placed the sum of morae in each verse. There is an alternation here that one does not at all expect to find. For instance, what are we to make of the first part of Ps. 111, in which the short verses are clearly distinguished, and in which the sum of morae in each half-verse is as follows:

10, 9, 9, 10, 9, 11, 10, 9, 10, 9, 12;  
12, 14, 11, 9, 9, 9, 9, 9, 12, 13, 11.

In any case it shows that the duration of the cycle does not vary greatly. It is somewhat like the mora count meter in Sanskrit poetry.

## PSALM 81

harnínu | le'lohím | 'uzzénu || harí'u | le'lohé | ya'ăkôbh |  
 s'eu zímrah | uth'nu thóph || kinnór | na'im | 'im nabhél |  
 tik'ú | bha'hódhesh | shophár || bakésh | l'yóm | haggénu |  
 ki hók | l'yisra'él | hu' || mishpát | le'lohé | ya'ăkôbh |  
 'edhúth | biho'séph | samó || b'ce'thó | al'érec | miçráyim || s'epháth |  
 lo' yadhá'ti | 'eshmá' |  
 hăširóthi | miš'sébbel | shikh'mó || kappáw | middúdh | ta'ăbhór'nah |  
 baççarâh | kará'tha | wa'ăhall'çékka || 'e'en'khá | b'zéther | rá'am ||  
 'ebhhan'khá | al mé | m'ribháh |  
 shemá' | ammi | w'a'idhah | bakh || yisra'él | 'im tish'ma' | li  
 lo' yih'yéh | bh'khá | 'el | zar || w'ló | thishta'hwéh | l'él | nekhár |  
 'anokhi | YHWH | 'elohékha || hamma'al'khá | me'érec | miçráyim || har'hébh |  
 pikha | wa'ămal'éhu |  
 w'lo' | shamá' | ammi | l'kolí || w'yisra'él | lo' 'ăbhah | li  
 wa'ăshall'héhu | bish'rírúth | libbám || yel'khú | b'mo'ăçó'thehém |  
 lu | ammi | shom'é' | li || yisra'él | bidhrakháy | y'hall'ékhu |  
 kim'e'át | 'oyebhehém | 'akhni' || w'al | çarehém | 'ashíbh | yadhí |  
 m'san'é | YHWH | y'kha'hăshu ló || wihí | 'ittám | l'olám |  
 wayya'ăkhi'lehu | me'hélebh | hittáh || umiççúr | d'bhásh | 'asbi'ékha |

## THE FIRST VERSE OF POETRY IN JOB (1:5b)

ʔuláy | haṭʔú | bhanáy || ubherʔkhú | ʔēlohím | bilʔbhabhám |

## THE FIRST SOLOQUY (3:10)

ki ló | ʔaghár | dalʔthé | bhiṭní || wayyaʔtér | ʔamál | meʔenáy |  
 lámmaḥ | loʔ | meréhem | ʔamúth || miḇbēten | yaʔáʔthi | wʔeghwáʔ |  
 maddúʔ | kiddʔmúni | bhirkáyim || umáh | shadháyim | ki | ʔinák |  
 ki ʔattáh | shakhábhti | wʔeshkót || yashánti | ʔaz | yanúʔh | li

## HIS LAST WORDS OF MEDITATION (31:36)

ʔim ló | ʔal shikhʔmí | ʔessaʔénnu || ʔʔendhénnu | ʔātaróth | li |  
 miʔpár | ʔʔadháy | ʔaggidhénnu || kʔmó | naḡhádḥ | ʔākarʔbhénnu |  
 ʔim ʔaláy | ʔadmathí | thiʔák || wʔyáhadḥ | tʔlaméha | yiḇhkayún |  
 ʔim kóḡah | ʔakhálṭi | bhʔli kháseph || wʔnéphesh | bʔaléha | hipṭápṭi |  
 táḡath | hiṭṭáh | yeʔʔ hóʔh || wʔtháḡath | sʔoráh | bhaʔsháh |

## LAMENTATIONS 1:1-3

ʔekháh | yaʔshʔbháh | bḡadhádḥ || haʔír | rabbáthi | ʔám |  
 hayʔtháh | kʔalmanáh || rabbáthi | bḡaggoyim |  
 saráthi | bammʔdḡinóth || hayʔtháh | lámáʔ |  
 bakhó | thiḇkhékḥ | balláylah || wʔdhimʔatháh | ʔal | lehʔyáh |  
 ʔen láh | mʔnaḡém || miḡkól | ʔohābbhéha |  
 kol reʔéha | báḡhʔdhu | bháh || háyu | lah | loʔyʔbhím |  
 galʔtháh | yʔhudháh | meʔoní || umeróbbḥ | ʔābhodháh |  
 hiʔ | yaʔshʔbháh | bḡaggoyim || loʔ | macʔáh | manóʔh |  
 kol-rodhʔphéha | hiʔsiḡhúha || ben | hammʔṣarim |

## SONG OF SONGS 1:2-4

*yishshakéni* | *minn<sup>e</sup>shikóth* | *píhu* || *ki-tobhím* | *dodhékha* | *miyyáyin* |  
*léré<sup>a</sup>h* | *shemanékha* | *to**h**ím* || *shémen* | *turák* | *shémékha* | *al-kén* | *alamóth* |  
*āhebhúkha* |  
*mash<sup>e</sup>khéni* | *ahārékha* | *narúçah* || *hēbhi<sup>a</sup>áni* | *hammélekh* | *hādhara<sup>w</sup>* |  
*naghúlah* | *w<sup>e</sup>nism<sup>e</sup>háh* | *bakh* || *nazkírah* | *dhodhékha* | *miyyáyin* | *mesharím* |  
*āhebhúkha* |

## PROVERBS 1:2-6

*ladhá<sup>a</sup>ath* | *hakh<sup>e</sup>máh* | *umuşár* || *l<sup>e</sup>habhín* | *im<sup>e</sup>ré* | *bhináh* |  
*laká<sup>a</sup>hath* | *muşár* | *haskél* || *çédhek* | *umishpát* | *umesharím* |  
*lathéth* | *lip<sup>e</sup>tha<sup>a</sup>yím* | *ar<sup>e</sup>máh* || *l<sup>e</sup>ná<sup>a</sup>ar* | *dá<sup>a</sup>ath* | *um<sup>e</sup>zim<sup>a</sup>máh* |  
*yismá<sup>a</sup>* | *hakhám* | *w<sup>e</sup>yóseph* | *lékah* || *w<sup>e</sup>nabhón* | *tahbulóth* | *yik<sup>e</sup>néh* |  
*l<sup>e</sup>habhín* | *mashál* | *um<sup>e</sup>liçáh* || *dibh<sup>e</sup>ré* | *hākhāmím* | *w<sup>e</sup>hidhothám*