A Biblical Hebrew Iambic Tetrameter: Proof of Concept Psalm 111

Vincent DeCaen
Toronto Public Library

Nov/2011
penultimate draft 5

Abstract

In the absence of a theory of Biblical Hebrew poetic meter, DeCaen (2009) can still establish a regularity in Psalm 111 at the prosodic level of the phonological phrase: two phrases per line. The average of four feet and eight syllables per line, however, suggests that an accentual-syllabic tetrameter has been missed in Psalm 111. The present study proposes such an iambic tetrameter for those biblical acrostics characterized by the octosyllabic profile. Commonplaces of iambic practice are combined with Tiberian Hebrew quantity (syllable weight). Psalm 111 is offered as the proof of concept of the resulting proposal.
A Biblical Hebrew Iambic Tetrameter: Proof of Concept Psalm 111

I cannot settle which is worse, the Anti-Novel or Free Verse.\(^2\)

But seek alone to hear the strange things said
By God to the bright hearts of those long dead,
And learn to chant a tongue men do not know.\(^3\)

1. Introduction

1.1. Vance (2001) argues that of necessity a meter cannot exist in Biblical Hebrew (BH) poetry,\(^4\) thereby freeing scholars “from the futile search for a metrical scheme which does not exist” (n. 16, p. 6). Ostensibly the ulterior motive for this logical non-starter is to foreclose on any textual emendation *metri causa*.\(^6\)

1.2. DeCaen (2009) is a simple refutation of Vance’s thesis. In the absence of detailed theory of BH meter, it is still possible to employ the prosodic hierarchy of Tiberian Hebrew (TH) phonology as a diagnostic filter on Psalm 111. It is demonstrated that regularity obtains at the level of the phonological phrase: two phrases per line.\(^8\) This conclusion recalls the forgotten proposal of Jerzy Kuryłowicz (1972: Ch. 10, §§14-34, 166-178; 1975: Ch. 12, §§6-17, 215-225; cf. Cooper 1976) and his “accented word-complex”—for practical purposes the TH phonological phrase (DeCaen 2009: n. 7; see further Vance 2001: Ch. 2, 166-173).\(^9\)

1.3. Among the many problems with DeCaen (2009),\(^10\) the most glaring is the failure to capture a significant linguistic generalization: the average TH foot count is 4 feet, and the average syllable count is 8 syllables—mean, median and mode (see the
summary table in Appendix 2). The range of 7-9 syllables in Psalm 111, with one outlier of 6 syllables, strongly suggests that an accentual-syllabic tetrameter has been missed. The present study works out the details of such an accentual-syllabic tetrametric hypothesis and provides an analysis of the acrostic Psalm 111 as proof of concept.

2. Octosyllabism in the Acrostics

2.1. It has been understood since at least Culley (1970) that BH poems can be sorted by statistical profiles (p. 28; cf. Fokkelman 2000: 9-11 on “normative numbers”), and that the resulting taxonomy implies a “metrical structure of some sort” (p. 27) pace Vance. The most regular poem in Culley’s limited database is Psalm 111, an examplar of the octosyllabic group in which he includes Psalms 2, 78, 89:21-46, 96, 112 (not surprisingly), 119; Job 6 and 9; and a pastiche from Numbers 23-24. His analysis of this group identifies a “significant range” of 8±1 syllables and the “most frequent length” (mode) of 8 syllables (p. 18).

2.2. Vance (2001) insists—correctly, I believe—that some independent principle be identified to establish the correct lineation; and he invokes the acrostic pattern as such a line-fixing principle. A successful theory of BH meter, on this view, can only be established in the first instance within his corpus of acrostics: Lamentations 1-5, Proverbs 31:10-31, and Psalms 25, 34, 37, 111-112, 119 and 145.

2.3. Within that specified database, the following six poems clearly exhibit the same statistical profile as Psalm 111: Vance’s “cola” with an average of 8 syllables, and “line” with an average of 16 syllables.
• Lam 5 (on Lam 5 as acrostic, see Guillaume 2009)
• Prov 31:10-31
• Ps 25
• Ps 34
• Ps 37
• Ps 112

Additional acrostics (Vance 2001: n. 20, p. 7) with the same profile can be added for consideration:

• Ps 9-10
• Nahum 1:2-8 (see further Renz 2009)

3. A Tetrameter in the First Line

3.1. Vance (2001) can be read ironically as outlining a rigorous methodology for establishing a meter in BH poetry. On this reading, one of his most important guiding principles, derived from his reading of Ransom, is the “unwritten compact” (Vance 2001: 30) or “metrical contract” (p. 39) that must be clearly declared in the opening line of every poem.¹²

As the distinguished poet John Hollander has pointed out, each individual poem creates a “metrical contract” with its reader. Once the poem’s meter has been established in its first few lines, the reader will then expect the meter to continue in the same pattern, and he will derive great pleasure from its continued presence. Of course, sophisticated poets will intentionally make slight variations from their established meter to achieve certain poetic effects; thus very few poems are perfectly regular from beginning to end. But all such changes must be executed carefully and subtly, with the full awareness that too many alterations will be disconcerting for the reader (Baer 2006: 19).

3.2. Accordingly, let us examine the metrical regularity of the opening line of Psalm 111: *ex hypothesi* the unambiguous declaration of the “metrical contract”. Following Fabb & Halle (2008), the metrical grid in (1) projects asterisks downwards onto successive gridlines.¹³ The strong claim to be pursued in the present study is that
regularity obtains at the level of the metrical foot—formally and crucially an asterisk on gridline 1.14 (N.B. DeCaen 2009 can be reformulated as a claim that regularity obtains only on gridline 2.)

\[
\begin{array}{ccccccc}
\text{'ô} & \text{deh} & \text{YH WH} & \text{bə} & \text{kol} & \text{lē} & \text{bāb} \\
\ast & \ast & \ast & \ast & \ast & \ast & \ast \\
\ast & \ast & \ast & \ast & \ast & \ast & \ast \\
\ast & \ast & \ast & \ast & \ast & \ast & \ast \\
\end{array}
\] 

(Ps 111:1a)

3.3. There is nothing particularly original about the proposed accentual-syllabic analysis in (1). The iambic tetrameter can be traced at least as far back as Hölscher (1920: §C, 99-101, esp. 100)—oddly absent from Vance’s treatment of accentual-syllabic proposals (2001: 207-220).17 Hölscher’s locus classicus of Job 3:3a is parsed in (2).

Notice crucially that there are only 7 syllables here: a “clipped” line.18

\[
\begin{array}{ccccccc}
\text{yō} & \text{bad} & \text{yôm} & \text{'iw wā led} & \text{bô} \\
\ast & \ast & \ast & \ast & \ast & \ast & \ast \\
\ast & \ast & \ast & \ast & \ast & \ast & \ast \\
\ast & \ast & \ast & \ast & \ast & \ast & \ast \\
\end{array}
\] 

(Job 3:3a)

3.4. Following Vance (2001), it must be the case _ex hypothesi_ that, for every poem characterized by the same statistical profile as Psalm 111, the first line will instatiate an iambic tetrameter as in (1) and (2). A notationally pared-down analysis is proposed in (3)-(10) where the delta ∆ marks supernumerary syllables.19 A statistical summary is added in (11).
(3)  za kōr YH WH meh— hā yā lā nū  (Lam 5:1a)
      * * * * * * * * Δ
      * * * * * * * *

(4)  ‘ē šet— hā yil mì yim şā’  (Prov 31:10a)
      * * * * * * * * *
      * * * * * * * * *

(5)  ‘ō deh YH WH ba kol— lib bî  (Ps 9:2a)
      * * * * * * * * *
      * * * * * * * * *

(6)  ‘ē lē kā YH WH nap ši ‘eš šā’  (Ps 25:1)
      * * Δ * * * * * * *
      * * * * * * * * *

(7)  ‘ā bā rā kā ‘et—YH WH ba kol—‘ēt  (Ps 34:2a)
      Δ * * * * * * Δ * * *
      * * * * * * * * *

(8)  ‘al— tit ḫar bammō rē ‘im  (Ps 37:1a)
      * * * * * * * * *
      * * * * * * * *

(9)  ‘aš rè— ‘iš yā rè’ ‘et— YH WH  (Ps 112:1a)
      * * * * * * Δ * * *
      * * * * * * * * *

(10) ‘ēl qan nō’ wo nō qēm YH WH  ( Nahum 1:2a)
      * * * Δ * * * * *
      * * * * * * * *

(11) Statistical summary of the ten opening lines

<table>
<thead>
<tr>
<th></th>
<th>syllables</th>
<th>feet</th>
<th>phonological phrases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ps 111:1a</td>
<td>8</td>
<td>2+2</td>
<td>2</td>
</tr>
<tr>
<td>Job 3:3a</td>
<td>7</td>
<td>2+2</td>
<td>2</td>
</tr>
<tr>
<td>Lam 5:1a</td>
<td>9</td>
<td>2+2</td>
<td>2</td>
</tr>
<tr>
<td>Prov 31:10a</td>
<td>7</td>
<td>5^22</td>
<td>2+2</td>
</tr>
<tr>
<td>Ps 9:2a</td>
<td>8</td>
<td>2+2</td>
<td>2</td>
</tr>
<tr>
<td>Ps 25:1</td>
<td>9</td>
<td>2+2</td>
<td>2</td>
</tr>
<tr>
<td>Ps 34:2a</td>
<td>10</td>
<td>4+1</td>
<td>2+2</td>
</tr>
<tr>
<td>Ps 37:1a</td>
<td>7</td>
<td>2+2</td>
<td>2</td>
</tr>
<tr>
<td>Ps 112:1a</td>
<td>8</td>
<td>2+3</td>
<td>2</td>
</tr>
</tbody>
</table>
3.5. Let us take the summary in (11) first. The top-down regulation of foot and phrase more or less confirms DeCaen (2009).23 The average count of 8 syllables (mean, median and mode) is expected *ex hypothesi*. Thus the strong claim of an accentual-syllabic tetrameter apparently passes Vance’s first test of first lines that declare the metrical contract. It remains to identify the specific principles that must be operating to regularize these first lines as iambic tetrameters.

3.6. Line types. The clipped line is found frequently: (2), (4), (8)-(10). A so-called feminine ending (extrametrical post-tonic), so common in English and especially German verse, is also found in (3). From these two commonplaces, the typical range of 7-9 syllables can be derived.

3.7. Syllable counting. All TH syllables are counted, including schwas and post-tonic syllables, especially the post-tonic of segholates: necessarily in (4) *metri causa*. The divine name is counted as only two syllables contra TH (n. 15).

3.8. Prosodic rules.24 Obviously, TH stress-retraction or *nasiğâ* is operative in (2) and (3). Indeed, the exploitation of TH stress-retraction is a feature of BH poetry.25 Further, the TH “long words” (Dresher 1994: 34-36; DeCaen 2008) that count as two TH feet behave as expected: crucially the long word *bammorē’im* counts as two feet in Ps 37:1a.
3.9. Pausal phonology. Contra TH, all verbs must be read as so-called pausal forms: crucially ‚ābārākā as ‚ābārēkā in Ps 34:2a. It must be added immediately that this does not really open up the gap between TH phonology and the phonology presupposed by the tetrameter. On the contrary, Hebrew contextual (non-pausal) stress-shifting is so very late both historically and derivationally (see further Goerwitz 1993). To anticipate the larger study of the BH acrostics, there are 5 instances in Prov 31 alone where the pausal form must be read *metri causa* to avoid the supernumerary TH foot: vv. 14a, 16b, 22a, 24a and 24b. The example in line 14a is parsed in (12): read pausal hāyātā versus non-pausal hāyətā.

$$\text{(12)} \quad \text{hā} \quad yə \quad tā \quad \text{ko} \quad 'ō \quad niy \quad yôt \quad sô \quad hēr \quad \text{(Prov 31:14a)}$$

3.9 Foot substitutions. Last but not least, a “catalogue of feet, the allowable substitutions, and the like” must be established (Vance 2001: 221). 27

3.9.1. Anapest. It is clear that the anapest is the major substitute for the iamb, appearing on gridline 0 as $\Delta * *$ in any position. 28 According to Fabb & Halle (2008), the $\Delta$ is typically “relatively unprominent” or “slurred” (p. 62). This is clearly the case in (6), (7) and (10). The preposition ’et in (9), however, stands out prominently; cf. (7).

Moreover, the preposition introduces a supernumery TH foot. In light of the text-critical difficulty in this verse, 29 it is tempting to delete the preposition as secondary ’et-insertion. 30 But given Vance’s strictures against textual emendation, it is best to let it pass.
3.9.2. Trochee. There is one case of “trochaic inversion” (8) parsed as an iamb (see n. 28). In iambic practice, trochaic inversion is generally confined to (a) the beginning of the line or (b) immediately after the caesura. Notice that the trochaic foot bāmmō in (8) appears immediately after the caesura.

3.10. By way of summary of §3, consider the parse of the concluding three lines of Ps 111 in (13)-(15). The first line (13) is a perfect iambic tetrameter. Anapests appear as the fourth foot in both (14) and (15)—not coincidentally, as will be seen in the sequel. The segholate šēkel in (14) must be read as two syllables metri causa. Line (14) is also a clipped line. Finally, the long word təhillātō projects two feet in (15) as expected.

(13) rē’ šît ḥok mâ yir ’at YH WH (Ps 111:10a)
    * * * * * * * * *
    * * * * * *

(14) šē kel tôb lə kol— ū šê hem (Ps 111:10b)
    * * * * * Δ * *
    * * * *

(15) tə hil lā tô ū me det lā ′ad (Ps 111:10c)
    * * * * * Δ * *
    * * *

4. Defective Lines and TH Quantity-Sensitivity

4.1. To satisfy Vance (2001), at least one complete poem in his acrostic database must be shown to be metrical throughout. The most regular poem, Psalm 111, appears to be the best hope: the theory outlined above will in principle cover those lines ranging over 7-9 syllables. However, the one line of 6 syllables (Ps 111:3a) is enough to torpedo the strong claim.
4.2. There are two ways to approach the single defective line. One way is simply to acquiesce to one defective line and to weaken the claim somewhat. Vance (2001) concedes that a 97% threshold is acceptable for the more complicated metrical systems, such as the accentual-syllabic system proposed here (p. 39 et passim). In this light, 21 of 22 metrical lines or 95% does not seem too bad.

4.3. The other way is to maintain the strong claim and accordingly to assume that another significant linguistic generalization has been missed. Let us consider in detail the defective line Ps 111:3a, parsed in (16). A question mark is used to mark the presumed location of the missing syllable.

(16) hôd— wo٣٢ hā dār po †ō lô (Ps 111:3a)  
* ? * * * ∆ *

4.4. Thus the question boils down to: what might be special about the TH syllable hôd? The immediate answer is that hôd is a TH heavy syllable (two moras).³³ That there is a three-way quantitative distinction in TH phonology has been well understood since at least Kahn (1987; see further DeCaen 2008).³⁴ The three-way contrast is illustrated in (17): in order, a shwa (0 moras, indicated by the place holder ∆³⁵), a light syllable (1 mora) and a heavy syllable (2 moras). The moras are marked by x’s projecting upwards to keep separate the mismatched metrical analysis projecting downwards. The convention of dividing the heavy syllables is borrowed from Kahn (1987).
Accordingly, let us imagine that a heavy syllable can license an additional asterisk *metri causa*. The proposal is illustrated in (18).

\[
\begin{array}{cccccc}
\Delta & \text{x} & \text{x} & \text{x} & \text{x} & \text{x}^{36} \\
\text{gō} & \text{dō} & \text{li-} & \text{im} \\
\ast & \ast & \ast & \ast & \ast
\end{array}
\]

(17)

\[
\begin{array}{cccccc}
\text{x} & \text{x} & \text{x} & \text{x} & \text{x} & \text{x}^{38} \\
\text{hō-} & \text{od—} & \text{wō} & \text{hā} & \text{dā-} & \text{ar} & \text{po} & \text{ˈō} & \text{lō} & (\text{Ps 111:3a}) \\
\ast & \ast & \ast & \ast & \ast & \ast
\end{array}
\]

(18)

4.5. It might be considered odd that Vance (2001) does not canvass the possibility of an accentual-syllabic meter that is also quantity-sensitive.\(^{39}\) There cannot be a principled objection to such a proposal, since such a meter is attested elsewhere, e.g., in Somali verse (Fitzgerald 2006). Fabb & Halle (2008) also analyze the mora-counting āryā meter in Sanskrit (§8.5), which bears comparison with the present proposal. Isaacs (1918: 22-24) already anticipates this āryā-like model of BH meter.

4.6. This invocation of TH quantity to save just one line might seem heavy-handed. However, the principle must apply wherever a verse of 7 syllables has only 3 TH feet. Consider, e.g., vv. 4b (19) and 9c (20) with the same metrical structure as (18) in the second foot. Looking ahead to the broader acrostic database, another representative example of a line with 6 syllables is added in (21) to give a sense of the possibilities.
4.7. There is an important variation on this quantity-sensitive theme: consonant-final verb forms are treated as if the final syllable were heavy contra TH. The prime example is the TH verb form *nātan the final syllable of which is inherently short (the form is therefore a candidate for stress-retraction *nātan\(^1\)). The verb *nātan scans in (22), however, as if it had the additional syllable of the underlying lexical form /natána/ and the historical form *natana.\(^2\) (Notice also the trochaic inversion of the first foot in (22).) Again, this opens up a very minor gap between TH phonology and that presupposed by the meter; and again, the phenomenon is widespread. A sterling example with the identical structure in Ps 111 is v. 9a in (23) (see further vv. 5b and 9b).
5. Conclusion

5.1. The complete analysis of Psalm 111 establishes, as a first approximation, the theory of a quantity-sensitive, accentual-syllabic (iambic) tetrameter. The theory should extend with little qualification to those BH acrostics with the octosyllabic profile (§2.3).

5.2. The analysis is set out in Appendix 1. The asterisks projecting downwards represent the proposed metrical scansion. The x’s projecting upwards represent the TH metrical structure. A statistical analysis is added in Appendix 2; cf. (11) above.

5.3. The approach begins with the commonplaces of iambic practice: line types and foot substitutions. The slightest of deviations from TH phonology are proposed: the uncontroversial bisyllabic reading of the divine name, and especially the exclusively pausal readings. The introduction of quantity (syllabic weight) is independently motivated in TH phonology—indeed, in historical Hebrew phonology and the Semitic family generally.

5.4. Anticipating the broader study, what makes Psalm 111 unique is the way the types of substitution are restricted to specific feet in the line. Anapests are restricted to the fourth foot. Trochees are restricted to the first foot. The contribution of heavy syllables extends from the first to the second foot. The consonant-final verb forms that contribute weight appear in the first and second positions, but not the third.
5.5. Looking ahead, the recent generative framework of Fabb & Halle (2008, 2009) is adequate for a sound linguistic formulation of the proposal and its application to the remaining acrostics. There are some technical questions around the proper treatment of foot substitutions, quantity (projecting moras) and the TH shwas within that framework, which will no doubt be resolved as analysis progresses.

5.6. The dual representation in Appendix 1 is presumably redundant, and the obvious question presents itself: to what extent is the TH metrical structure itself adequate as the input to a generative algorithm? On the one hand, the answer appears to be that, with some principled tweaking, it might very well be adequate. On the other hand, from a methodological point of view, the introduction of TH quantity wholesale seems extravagant. Moreover, the type of syllable implicated in Psalm 111 is a subset of TH heavy syllables: ḥǝsōd, hôd, hannûn and qādōš. Then too there are the verb forms such as nātan. However, the precise nature and role of quantity is an empirical question for any given poem, and its answer may provide a useful taxonomy of BH poetry, perhaps with diachronic implications (on BH diachronics, see further DeCaen 2001).
Bibliography


### Appendix I: Metrical Analysis of Psalm 111

<table>
<thead>
<tr>
<th>Line</th>
<th>Text</th>
<th>Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a</td>
<td>'ô deh YH WH bə kol— lē bā- ab</td>
<td>* * * * * * * *</td>
</tr>
<tr>
<td>1b</td>
<td>bə sô- od yə šā rî- im wə `ē dâ</td>
<td>* * * * * Δ * *</td>
</tr>
<tr>
<td>2a</td>
<td>gə dō lî- im ma `ā šē YH WH</td>
<td>* * * * * * * *</td>
</tr>
<tr>
<td>2b</td>
<td>də rû šî- im lə kol— ḫep šē he- em</td>
<td>* * * * Δ * *</td>
</tr>
<tr>
<td>3a</td>
<td>hô- od— wə hā dā- ar po `ô lô</td>
<td>* * * * Δ * *</td>
</tr>
<tr>
<td>3b</td>
<td>wə šid qā tô `ô me det lā ad</td>
<td>* * * * Δ * *</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4a</td>
<td>zë k̹er <code>â šâ lò nip lò </code>ō tâ- ayw</td>
<td></td>
</tr>
<tr>
<td>4b</td>
<td>hân nû- un w̪ ra ḥû- um YH WH</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5a</td>
<td>ṭe ṭe nâ tan ṭi rê `ā- ayw</td>
<td></td>
</tr>
<tr>
<td>5b</td>
<td>yiz k̹ōr lə `ô lâ- am hə rî tô</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6a</td>
<td>k̹ōaḥ ma <code>â šã- ayw hig ī- id lə </code>am mô</td>
<td></td>
</tr>
<tr>
<td>6b</td>
<td>lâ têt lâ he- em na hâ lat gô yî- im</td>
<td></td>
</tr>
</tbody>
</table>
10a  רֶ' ſֵי- א' ḥוֹק מַּייר' at YH WH
   * * * * * * *

10b  šē kel ťô- ob lô kol— ſē he- em
   * * * * Δ * *

10c  tô hil lâ ťô me det lâ ŕad
   * * * * Δ * *
Appendix 2: Statistical Analysis of Psalm 111

<table>
<thead>
<tr>
<th></th>
<th>Syllables</th>
<th>TH Feet</th>
<th>Words</th>
<th>Phonological Phrases</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Vance</td>
<td>DeCaen</td>
<td>MT</td>
<td>Cons.</td>
</tr>
<tr>
<td>1a</td>
<td>8</td>
<td>8</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>1b</td>
<td>8</td>
<td>8</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>2a</td>
<td>7</td>
<td>7</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>2b</td>
<td>8</td>
<td>8</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>3a</td>
<td>6</td>
<td>6</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>3b</td>
<td>9</td>
<td>9</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>4a</td>
<td>8</td>
<td>9</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>4b</td>
<td>7</td>
<td>7</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>5a</td>
<td>6</td>
<td>7</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>5b</td>
<td>8</td>
<td>8</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>6a</td>
<td>8</td>
<td>8</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>6b</td>
<td>8</td>
<td>8</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>7a</td>
<td>9</td>
<td>9</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>7b</td>
<td>7</td>
<td>7</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>8a</td>
<td>8</td>
<td>8</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>8b</td>
<td>9</td>
<td>8</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>9a</td>
<td>7</td>
<td>7</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>9b</td>
<td>8</td>
<td>8</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>9c</td>
<td>7</td>
<td>7</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>10a</td>
<td>8</td>
<td>8</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>10b</td>
<td>7</td>
<td>8</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>10c</td>
<td>9</td>
<td>9</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>170</td>
<td>172</td>
<td>77</td>
<td>66</td>
</tr>
<tr>
<td>Min</td>
<td>6</td>
<td>6</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Max</td>
<td>9</td>
<td>9</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Mean</td>
<td>8</td>
<td>8</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Med.</td>
<td>8</td>
<td>8</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Mode</td>
<td>8</td>
<td>8</td>
<td>4</td>
<td>3</td>
</tr>
</tbody>
</table>
Endnotes

1 I would like to thank Elan Dresher, Nigel Fabb, John Hobbins and Jim Price for valuable, critical feedback on earlier unpublished work in this area.

2 W. H. Auden, “Doggerel by a Senior Citizen” (ll. 35-36).

3 W. B. Yeats, “To the Rose upon the Rood of Time” (ll. 19-21).

4 As David Petersen succinctly summarizes, Vance (2001) “convincingly demonstrates that meter, as defined by scholars of non-biblical poetry, does not exist in biblical Hebrew poetry” (from the preface to Vance 2001: vii).

5 One cannot prove that something does not exist, unless there is some logical impossibility involved.

Furthermore, the structure of Vance’s argument is inductive, and so is subject to all the logical problems of induction. For an entertaining look at the problem of induction, see the excellent books by Nassim Taleb (2005, 2010) on randomness and the “black swan”.

6 This ulterior goal of foreclosure is boldly proclaimed by David Petersen in his preface to Vance (2001): “Consequently, scholars should no longer use the assumed existence of meter as a basis for textual emendation that seeks to make poetic texts more ‘metrical’ or identify certain texts as poetry based on the presence of ‘meter’ or, alternatively, as prose based on its absence” (p. ix).

The goal of foreclosing on emendation metri causa is reiterated in Vance’s conclusion. “From at least the beginning of the Christian era, scholars have argued that the Hebrew Bible contains poetry. Moreover, in the vast majority of cases, those who have presented such an argument have described that poetry as metrical…. Having posited a theory of Hebrew meter, the scholars were wont to use it as the basis for exegetical decisions such as emending the text (even where there was no textual support for the proposed emendation)…. However, if meter is, in fact, not an element integral to Hebrew poetry, then such exegetical decisions have no foundation” (p. 489).

7 Mora (μ) < syllable (σ) < foot (F) < phonological word (ω) < phonological phrase (φ) < intonational phrase (I) < utterance (U). See further DeCaen (2009: (3)) and Dresher (1994: esp. (4), p. 8).

Hobbins (2007) claims priority both in the general spirit of his approach and in the specific appeal to the prosodic hierarchy of Generative Phonology. However, there are fundamental differences in theory and execution.

Second, Hobbins (2007) identifies the phonological word (\(\omega\)), more or less the Masoretic word, as the defining timing-unit. While he finds inspiration in the work of Harshav and Alter, he is essentially reformulating the strong-stress theory in the long, proud tradition of Ley, Budde and Sievers. His approach is accordingly exposed to the same criticisms (e.g., Vance 2001: ch. 2, “Accentual”, pp. 97-173) and accordingly should be rejected. By way of contrast, there is no role for the “word” to play in DeCaen (2009), as is also true in the present study; rather, the TH foot and phrase are the basis for the analysis.

Third, both Hobbins (2007) and DeCaen (2009) appeal to the phonological phrase (\(\phi\)) in the top-down regulation of the line. Whereas DeCaen (2009) appeals directly to TH phonology, identifying the \(\phi\) with the musico-prosodic phrases of TH accentuation (following the seminal study by Dresher 1994), Hobbins (2007) defines a “verset” as analogous to the \(\phi\).

DeCaen (2009) should be preferred, all things being equal (they never are), for (a) meeting Vance’s basic criteria for a theory of BH poetry (arguably Hobbins 2007 does not); (b) the stricter top-down regulation of heterometry and anisosyllabism (the question as to what constitutes a “possible line” of poetry); and (c) for eschewing reconstruction and thus eliminating the gap between TH phonology and poetic measure.

8 Typically, a TH disjunctive accent marks the right edge of a phonological phrase (Dresher 1994). However, in the TH poetic system of accents, the disjunctive becomes “virtual” in specific circumstances: the “virtual disjunctive” appears as a conjunctive in the poetic chant, but still functions globally as a disjunctive in the syntax of the accents (see further Price 1990: Part II; see also Flender 1992). DeCaen (2009) explicitly discounts the poetic transformations, and counts phonological phrases in this light (see Appendix 2 below).

9 Hobbins points out (p.c.) that a similar proposal by Vetter (1897) is cited in the footnotes to Dhorme’s discussion of the meter in Job (1926: cxlvi, ns. 2-3). Vetter sets forth the “elementarste und grundlegende Gesetz” that a line is divided into two “Nebencäsuren” (pp.399f) which certainly look like two phonological phrases on first inspection. However, there is the qualification “auf logischer Grundlage”, and it quickly becomes clear that TH phonology has very little to do with Vetter’s proposal, which is founded on semantic criteria instead.

10 There are admittedly a number of major problems with the proposal in DeCaen (2009). Among the theoretical difficulties, the following two figure prominently.

First, technically the proposal is not a “metrical theory” of BH poetry per se, which would instead require metrical-grid theory and analysis, consistent with the interdisciplinary framework of Generative Metrics (e.g., Halle & Idsardi 1995, Dresher & Friedberg 2006, Fabb & Halle 2008, 2009, Aroui & Arleo 2009). Rather, it is a musico-prosodic analysis in which the TH accentuation stands in as a reasonably reliable proxy of the underlying TH metrical structure.

Second, the higher-level phonological phrase as a metrical prime is highly implausible (unique?) in both theoretical and cross-linguistic perspective.
In contrast to the majority with a regular 16 syllables per Vance’s “line” and 8 syllables per “cola”, Lam 1-3 share a unique profile (average of 13 syllables) that clearly contrasts with Lam 4 (average of 14 syllables). Psalm 145 has its own profile: clearly 18 syllables per line and 9 per colon. While Culley (1970) seems to group 119 with the octosyllabic group (pp. 25-26), its average count is closer to 17 syllables, not 16.

“Meter is not a description of what the poet has accomplished; it is a contract between the poet and the reader wherein the poet declares what he or she is going to do. This contract sets up expectation in the reader. The fulfilling of the contract may involve permissible variations to which the reader is sensitive and which give added pleasure to the reader. However, for a poem to be considered metrical, it must exhibit a discernible and highly regular pattern” (Vance 2001: 39).

“For meter to work, the audience must be able to perceive it. Meter is a contract between the poet and the reader. The poet declares what he or she is going to do in the opening lines of the poem, and this, in turn sets up the reader’s expectation. The fulfilling of the contract may involve permissible variations to which the reader is sensitive and that give heightened pleasure for the reader…” (Vance 2001: 491).

For those with a formal interest, the parsing algorithm that generates the well-formed iambic-tetrametrical grid in (1) can be specified as follows (for detailed theory and application, see Fabb & Halle 2008, 2009).

A syllable projects an asterisk onto gridline 0.
(Failure to project is marked by the place-holder delta ∆.)

Gridline 0: starting at the right edge, insert a right-bracket, form binary groups, heads right (incomplete groups are permitted).

Gridline 1: starting at the right edge, insert a right-bracket, form binary groups, heads right.

Gridline 2: starting at the right edge, insert a right-bracket, form binary groups, heads right.

The algorithm outputs the following analysis:

<table>
<thead>
<tr>
<th>'ô</th>
<th>deh</th>
<th>YH</th>
<th>WH</th>
<th>bə</th>
<th>kol—</th>
<th>lē</th>
<th>bāb</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>(</em>)</td>
<td></td>
<td>*</td>
<td><em>(</em>)</td>
<td></td>
<td><em>(</em>)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><em>(</em>)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><em>(</em>)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Ps 111:1a)

0
1
2
3
Not to be confused with the prosodic foot (F) of TH phonology or any reconstructed phonology of ancient Hebrew.

The argument for the bisyllabic analysis of the divine name would take us well beyond the scope of this limited study, so it will simply be left stipulated. The three clitic versions yāhû, yǝhô, and yāh suggest something very close to yāhû.

Linguistics as applied mathematics begins counting at 0 not 1. This same convention is adopted in the numbering of accent “degrees” in Dresher (1994), following Cohen (1969): D0 to D3. (Other notational systems can be found in Price 1990 and Weil 1995.)

Vance’s survey may be supplemented in several ways. See, e.g., the valuable historical survey maintained and updated online by John Hobbins: http://ancienthebrewpoetry.typepad.com/ancient_hebrew_poetry/files/annotated_bibliography.pdf.

The clipped line, of course, goes a long way to explaining the variable syllabic count. On the clipped line in poetry generally, see e.g. Steele (1999: ch. 2, §6, pp. 84ff). Within the framework of Fabb & Halle (2008, 2009), the degenerate initial foot is characterized as an “incomplete group” (see n. 13).

Technically, these syllables are extrametrical; see n. 13. These ∆ syllables are said to fail to “project” onto gridline 0 by Fabb & Halle (2008: 60-63; 2009: 184). “Non-projection of a syllable is a metrical fact, not a phonetic one. Nevertheless, non-projected syllables tend to be relatively unprominent and often can be regarded as instances of slurred pronunciation” (2008: 62).

Notice that the divine name is being counted as two syllables against the TH practice (see n. 15). Notice also the high frequency of the divine name in these opening lines (7/10).

The metrical grid is necessarily dichotomous by rule (see n. 13). This column effectively summarizes the strong claim pursued in the present work.

Vance is employing a system that counts segholates as monosyllabic contra TH. This will systematically lower his average syllable-count.

There are two qualifications. First, DeCaen (2009) is systematically disconfirmed by lines in which there is a mismatch between the necessarily medial caesura of the metrical parse (n. 13) and the so-called “final” caesura of the TH prosodic phrasing (4+1 in Ps 34:2a and 3+1 in Nahum 1:2a). Since TH phrasing is maximally dipodic, it follows that there must be 3 instead of the required 2 phrases: e.g., (2+1)+1 in Nahum 1:2a.
Second, DeCaen (2009) is disconfirmed by the two instances of supernumerary TH feet (Ps 34:2a ‘ābārākā and Ps 112:1a ‘et—YHWH). These two disconfirming cases receive explanations below.

24 The sandhi rules of spirantization and external gemination are irrelevant here.

25 Revell (1987) remarks on the higher frequency of stress-retraction in the so-called poetic books marked up with the poetic system of accents: Job, Proverbs and Psalms (n. 3, p. 10; §1.17, pp. 16ff).

26 See especially Goerwitz (1993) on pausal phonology. See also Churchyard (1999: ch. 2).

27 The major obstacle that Vance (2001) sets in the way of an accentual-syllabic meter is “the compiling of a catalogue of metrical feet” (see his summary p. 220).

28 Technically there can be no “substitutions” in Fabb & Halle (2008), hence the necessary use of the ∆. The word and concept should therefore be understood informally in the present work.

29 **BHS:** an insertion (?); there a few manuscripts as well as a Cairo Geniza fragment without ‘et.

30 The phenomenon can be established in comparing those BH psalms that have come down to us in different versions: 2Sam 22 || Psalm 18; and the pastiche 1Chr 16:8-22 || Ps 105:1-15; 1Chr 16:23-33 || Ps 96:1b-13; 1Chr 16:34-36 || Ps 106:1, 47-48.

A good example of ‘et-insertion in the Psalms is Ps 105:11 against 1Chr 16:18. Notice that the argument in this particular case is not in the first instance *metri causa* but rather *lectio difficilior*.

31 It may be objected that the delta of the anapest ‘ōśēhem is prominent, not “unprominent”. However, the alternative reading suggested by BHS, ‘ōśēhā with a feminine ending (no pun intended), would eliminate the problem. Beyond violating Vance’s severe strictures against emendation, the manoeuvre still does not resolve the case of hepsēhem (v. 2b). In this regard, it should be emphasized that the exact wording in Fabb & Halle (2008) is “tend to be relatively unprominent” (p. 62, emphasis added).

32 It might be objected that a shwa cannot head a foot. There are four basic replies.

First, it is a commonplace in accentual-syllabic meters that a weak syllable can occupy a strong position. The so-called pyrrhic foot (dibrach or doubly weak) is a not uncommon substitution in English poetry; it often appears partnered with a spondee (doubly strong). See further, e.g., Fussell (1979: ch. 3).

Second, consider the obvious French parallel to the TH shwa: the French *e caduc* or *e muet* drives French versification. The analysis of the following example from Baudelaire’s “Bénédiction” (Fleurs du Mal) has been adapted from Dane (2010: A.3.1.1., p. 39; A.5.1., 42). Only ten syllables (marked by x’s above the line) out of the thirteen are
even pronounced in spoken French (the o’s mark the “unpronounced syllables”). Moreover, two of these otherwise silent shwas are heads of metrical feet (on the scansion of the alexandrin, see further Fabb & Halle 2008: ch. 5; 2009: §§5-6, pp. 181-189).

Lorsque, par un décret des puissances su prémes.

\[
\begin{array}{cccccccccccc}
\times & o & x & x & x & x & x & x & o & x & x & o \\
\end{array}
\]

\[\Delta \quad 0 \]

\[\Delta \quad 0 \]

Third, the psalms were meant for singing. In this regard, Culley begins, “We do not know which texts were performed to music or what the music was like, and so we are unable to establish to what extent the texts may have been adjusted to the music, receiving a structure not clearly apparent in the text themselves…” (1970: 13). He then points to the obvious mismatch between phonological and musical “stress”: “It should also be recognized that, in texts which were sung, it is not always necessary for the stress in the music to coincide with the linguistic stress, since the text may be accommodated or adjusted to the melody” (p. 15).

Fourth and obviously, we do not know how the syllable was actually pronounced, yet the probability is high that the syllable was neither pronounced nor treated as a shwa at the relevant period. Thus, there is no difficulty reading wāhādār if the imagination balks at the shwa heading a metrical foot.

Hobbins points out (p.c.) that such an approach—TH heavy syllable (including heavy by position) as two moras versus one—is anticipated by Isaacs (1918: esp. p. 26). The very odd thing about Isaacs (1918), however, is that he introduces a complete moraic analysis in some detail, only to ignore it in what is essentially a theory of a word-based rhythm.

It is deeply puzzling in this light that Vance (2001) concludes, “in my opinion, enough is known of Hebrew vocalization to reject quantitative meter as a real possibility. That no one has proposed a quantitative meter in the last century would tend to support this conclusion” (p. 95). This conclusion combines a non sequitur with an apparent lack of familiarity with TH phonology as it has been understood in the last century.

Within the framework of Fabb & Halle (2008, 2009), we can define a TH shwa as simply the “failure to project” an x onto gridline 0.

Notice that TH prosody is based on a moraic trochee (cf. Churchyard 1999).

The poetic meter implies gādōlim instead. See n. 32.

TH word-stress must be assigned to a well-formed moraic trochee (a minimum foot constraint; see further Hayes 1995). Even though the syllable lō appears to be inherently
or lexically light (this is an empirical question), it nevertheless must count as “heavy by position” because it bears a TH accent.

39 While quantitative systems on the one hand and accentual-systems on the other generate a huge but not intractable search space, the combination of the two principles generates a vast search space: too vast to foreclose on, given the handful of patently abysmal proposals reviewed in Vance (2001).

40 The TH accentuation is unambiguously signalling that there is in fact no “missing foot” to begin with. The disjunctive ʿtiphāʿ (D1f) that is assigned to bāttēnu can only appear in this context if one or both of the words are “long”. Since lēnokrīm is unequivocally not a long word, it follows that bāttēnu is the long word (two TH feet). The forms of bayit are undoubtedly some of the quirkiest in TH lexical phonology; but that the first syllable in bāttēnu is heavy is irrefragable.

41 A word ending in a TH lexically or inherently heavy syllable (i.e., not rendered “heavy by position” in the postlexical phonology) is impervious to the stress-retraction rule: e.g., dābār is never subject to stress-retraction.

42 Notice that the tonic syllable in TH becomes “heavy by position” postlexically—though lexically light, as confirmed, e.g., by the stress-retraction data (cf. n. 41).