

Genesis 1:14–31—Logotechnical Prosodic Analysis

Translation and Textual Notes

I. Second Three Days: Luminaries and Living Creatures Gen 1:14–31

A. Strophe 1: God Creates Lights in the Dome of the Sky (1:14–15) [7.10]

1:14	And God said / “Let there be lights / in the dome / ^a of the sky / to divide / the day / from the night //	19 2 7 2 <u>18 3</u>	4 4 0 2 2 0 <u>5 5 0</u>
		1:13–14c	17 17 0
	And let them be for signs / and set-times / and for days / and years //	18 2 <u>12 2</u>	3 0 3 <u>2 0 2</u>
		1:13–14	22 17 5
1:15	And let them be for lights / in the dome / ^a of the sky / to give light / upon the earth” //	19 3 <u>11 2</u>	4 4 0 <u>3 3 0</u>
		1:14–15b	23 18 5
	And it was so //	<u>6 1</u>	<u>2 0 2</u>
		1:10–15c	81 64 17

B. Strophe 2: Creation of the Sun, Moon and Stars—End of Day Four (1:16–19) [12.11]

1:16	And God made / the two great lights / the greater light / to rule the day /	24 2 <u>18 2</u>	6 6 0 <u>5 0 5</u>
		1:15–16b	20 13 7
	And the lesser light / to rule the night /	<u>20 2</u>	<u>5 0 5</u>
		1:14–16c	41 24 17
	And \ ^a the stars //	<u>10 1</u>	<u>2 0 2</u>
		1:12–16	67 44 23
1:17	And God / placed them / in the dome of the sky // to give light / upon the earth //	23 3 <u>11 2</u>	5 5 0 <u>3 0 3</u>
		1:16–17	26 11 15
1:18	And to rule / in the day / ^a and in the night / and to divide / the light / from the darkness //	13 3 <u>20 3</u>	3 3 0 <u>5 5 0</u>
		1:15–18b	43 26 17
	And God saw / that it was good //	<u>12 2</u>	<u>4 0 4</u>
		1:14–18	63 37 26
1:19	And it was evening / and it was morning / day four //	<u>20 3</u>	<u>6 6 0</u>

1:17–19 **26** 19 7

C. Strophe 3: Creation of Fish and Birds—End of Day Five (1:20–23) [16.14]

1:20 **And God said** / 9 1 2 2 0
 “Let the waters swarm / with a swarm of living creatures // 14 2 5 5 0
 and as for the birds / let them fly above the earth / 14 2 4 0 4
 1:19–20c **17 13 4**

And across the open / dome of the sky” // 14 2 4 0 4
 1:19–20 **21 13 8**

1:21 **And God created** / the great / sea monsters // 22 3 5 5 0
 and every living creature / that crawls about / 16 2 5 0 5
 1:18–21b **43 26 17**

With which the waters swarmed / after their kind / 16 2 4 0 4
 and every winged bird / after its kind / 17 2 5 0 5
 1:18–21d **52 26 26**

And God saw / that it was good // 11 2 4 0 4
 1:21 **23 5 18**

1:22 **And God / blessed** them / saying // 18 3 4 4 0
 “Be fruitful and multiply / 8 1 2 0 2
 1:18–22b **62 30 32**

And fill the waters / in the seas / 13 2 4 0 4
 1:20–22b **48 16 32**

And the birds / let them multiply / on the earth” // 19 3 3 0 3
 1:20–22 **51 16 35**

1:23 **And it was morning / and it was evening / day five** // 19 3 6 6 0
 1:19–23 **75 36 39**

D. Strophe 4: Creation of Land Animals after Their Kind (1:24) [4.4]

1:24 **And God said** / 9 1 2 2 0
 “Let the earth bring forth / living creatures / after their kind / 19 3 5 5 0
 1:22–24b **26 17 9**

Herd-animals and crawling things / 9 1 2 2 0
 and wildlife of the earth / after their kind” // 12 2 3 3 0
and it was so // 6 1 2 0 2
 1:20–24 **67 34 33**

E. Strophe 5: Creation of Wildlife, Herd-animals and Human Beings (1:25–27) [14.16]

1:25	And God made / the wildlife of the earth / after their kind / and the herd-animals / after their kind /	21 3 _13 2_	6 6 0 <u>3 3 0</u>
		1:24–25b	23 21 2
	And everything / that creeps on the ground / after its kind / and God saw / <u>that it was good</u> //	20 3 _11 2_	5 5 0 <u>4 0 4</u>
		1:24–25	32 26 6
1:26	And God said / “Let us make humankind / in our own image / according to our likeness //	22 3 <u>7 1</u>	5 5 0 <u>1 1 0</u>
		1:24–26b	38 32 6
	And let them rule over / the fish of the sea / and birds of the sky / and the herd-animals / and all the earth / and crawling things / that crawl / on the earth” //	19 3 17 2 _20 3_	5 0 5 3 0 3 <u>5 0 5</u>
		1:25–26	37 20 17
1:27	And God created / humankind / in his own image / in the image of God / he created him // male and female / he created them //	20 3 16 2 <u>19 2</u>	5 5 0 4 4 0 <u>4 0 4</u>
		1:26–27	32 15 17

F. Strophe 6: God’s Blessing: Be Fruitful, Fill the Earth and Subdue It (1:28–29) [11.12]

1:28	And God / blessed them / and God \^a said to them / “Be fruitful and multiply / and fill the earth / and subdue it //	26 3 <u>25 3</u>	6 6 0 <u>6 6 0</u>
		1:24–28c	76 53 23
	And rule over / the fish of the sea / and the birds of the sky // and every living creature / that creeps on the earth” //	20 3 <u>19 2</u>	5 0 5 <u>5 0 5</u>
		1:21–28	128 68 60
1:29	And God said / “Behold / I have given to you / every plant / yielding seed /	20 3 _12 2_	5 5 0 <u>5 5 0</u>
		1:28–29b	32 22 10
	That / is on the face of all the earth /	_12 3_	<u>5 5 0</u>
		1:26–29c	69 42 27
	And every tree / that has fruit / yielding seed // to you they shall be / <u>for eating</u> //	24 3 <u>9 2</u>	9 9 0 <u>3 0 3</u>
		1:26–29	81 51 30

G. Strophe 7: Green Plants are Food for Animals—Day Six Ends (1:30–31) [10.7]

1:30	And for every living creature / of the earth / and for every bird of the sky /	11 2 _11 1_	3 3 0 <u>3 3 0</u>	
		1:27–30b	68 51 17	
	And for all / that crawls on the earth /	_15 2_	<u>4 4 0</u>	
		1:29–30c	37 34 3	
	Which has in it / the breath of life / (I have given) all green plants / <u>for eating</u> //	9 2 <u>11 2</u>	4 4 0 <u>5 5 0</u>	
		1:29–30e	46 43 3	
	And it was so //	_6 1_	<u>2 0 2</u>	
		1:26–30	102 70 32	
1:31	And God saw / all that he had made /	_15 2_	<u>6 6 0</u>	
		1:24–31a	140 102 38	
	<u>And behold it was good</u> / exceedingly //	_9 2_	<u>3 3 0</u>	
		1:29–31b	57 52 5	
	<u>And it was evening / and it was morning / day six</u> //	<u>19 3</u>	<u>6 0 6</u>	
		1:14–31	275 170 105	
		1:1–31	434 280 154	

Scansion in Accentual Stress Units:

$$(7.10).(12.11) . (16.14) . (4.4) . (14.16) . (11.12).(10.7)$$

$$= (17 + 23) + 30 + 8 + 30 + (23 + 17) = 70 + 8 + 70 = 148$$

or: **78 // 78** {**78 = 26 x 3**}

Concentric Compositional Formula: 275 = 137 + 1 + 137

or: 138 // 138

{**138 = 23 x 6**}

[word count]
[with pivot counted in each half]

Notes:

- 1:14^a Reading *munah* here in BHS as disjunctive.
- 1:15^a Reading *munah* here in BHS as disjunctive.
- 1:16^a Reading *tip̄hā* in BHS as conjunctive.
- 1:18^a Reading *munah* here in BHS as disjunctive.
- 1:28^a Reading *geres̄* here in BHS as conjunctive.

Summary of the Logotechnical Prosodic Analysis

1. Gen 1:14–31 has seven strophes: 1:14–15, 16–19, 20–23, 24, 25–27, 28–29 and 30–31.

A	1:14a–c	balanced dyad + pivot:	$(19 + 7 + 18)$	=	$19 + 7 + 18$	morae
	1:14d–15b	2 balanced dyads:	$(18 + 12) + (19 + 11)$	=	$30 + 31$	morae
	{verse 15ab functions as a bridge connecting two parts and belonging to both}					
	1:15	balanced dyad:	$(19 + [11 + 6])$	=	$19 + 17$	morae
B	1:16–17	dyad & triad + pivot:	$(24 + 18) + 20 + (10 + 23 + 11)$	=	$42 + 20 + 44$	morae
	1:18–19	2 balanced dyads:	$(13 + 20) + (12 + 20)$	=	$33 + 32$	morae
C	1:20–21d	triad & dyad + pivot:	$(9 + 14 + 14) + 14 + (22 + 16)$	=	$37 + 14 + 38$	morae
	1:21e–23	2 balanced dyads:	$(11 + 18 + 8) + 13 + (19 + 19)$	=	$37 + 13 + 38$	morae
X	1:24	2 balanced dyads:	$(9 + 19) + ([9 + 12] + 6)$	=	$28 + 27$	morae
C'	1:25–26b	3 balanced dyads:	$(21 + 13) + (20 + 11) + (22 + 7)$	=	$34 + 31 + 29$	morae
	1:26c–27	2 balanced triads:	$(19 + 17 + 20) + (20 + 16 + 19)$	=	$56 + 55$	morae
B'	1:28a–c	balanced dyad:	$([14 + 12] + 25)$	=	$26 + 25$	morae
	1:28d–f	balanced dyad:	$([10 + 10] + 19)$	=	$20 + 19$	morae
	1:29	2 balanced dyads + pivot:	$(20 + 12) + 12 + (24 + 9)$	=	$32 + 12 + 33$	morae
A'	1:30a–e	2 balanced dyads + pivot:	$(11 + 11) + 15 + (9 + 11)$	=	$22 + 15 + 20$	morae
	1:30f–31	balanced dyad + pivot:	$([6 + 15]) + 9 + 19)$	=	$21 + 9 + 19$	morae

2. The first strophe (1:14–15) has two parts arranged in 4 subdivisions on the basis of word-count: 1:14a-c, 14de, 15ab and 15c.

- 1:13–14c **17** words and **17** words before *atnach*
- 1:13–14 **17** words before *atnach*
- 1:14–15b **23** words
- 1:10–15 **64** (= **32 x 2**) words before and **17** words after *atnach*

3. The second strophe (1:16–19) has two parts arranged in 7 subdivisions on the basis of word-count: 1:16ab, 16c, 16d, 17, 18ab, 18c and 19.

- 1:14–16c **17** words after *atnach*
- 1:12–16 **23** words after *atnach*
- 1:16–17 **26** words
- 1:15–18b **43 = 26 + 17** [compositional formula]
- 1:14–18 **26** words after *atnach*
- 1:17–19 **26** words

4. The third strophe (1:20–23) has three parts arranged in 9 subdivisions on the basis of word-count: 1:20a-c, 20d, 21ab, 21cd, 21e, 22ab, 22c, 22d and 23.

- 1:19–20c **17** words
- 1:18–21b **43 = 26 + 17** [compositional formula]
- 1:18–21d **52 = 26 + 26** [compositional formula]
- 1:21 **23** words
- 1:18–22b **32** words after *atnach*

- 1:20–22b **32** words after *atnach*
 - 1:20–22 **51** (= **17** x 3) words
 - 1:19–23 **39** (= **13** x 3) words after *atnach*
5. The fourth strophe (1:24) is a single part arranged in 2 subdivisions on the basis of word-count: 1:24ab and 24cd.
- 1:22–24b **26** words and **17** words before *atnach*
 - 1:20–24 **34** (= **17** x 2) words before *atnach*
6. The fifth strophe (1:25–27) has two parts arranged in 5 subdivisions on the basis of word-count patterns: 1:25ab, 25cd, 26ab, 26c–e and 27.
- 1:24–25b **23** words
 - 1:24–25 **32** words and **26** words before *atnach*
 - 1:24–26b **32** words before *atnach*
 - 1:25–26 **17** words after *atnach*
 - 1:26–27 **32** words and **17** words after *atnach*
7. The sixth strophe (1:28–29) has three parts arranged in 5 subdivisions on the basis of word-count: 1:28a–c, 28d–f, 29ab, 29c and 29de.
- 1:24–28c **23** words after *atnach*
 - 1:21–28 **128** (= **32** x 4) words and **68** (= **17** x 4) words before *atnach*
 - 1:28–29b **32** words
 - 1:26–29c **69** (= **23** x 3) words
 - 1:26–29 **51** (= **17** x 3) words before *atnach*
8. The seventh strophe (1:30–31) has two parts arranged in 7 subdivisions on the basis of word-count patterns: 1:30ab, 30c, 30de, 30f, 31a, 31b and 31c.
- 1:27–30b **68 = 51 + 17** [compositional formula]
 - 1:29–30c **34** (= **17** x 2) words before *atnach*
 - 1:29–30e **46** (= **23** x 2) words
 - 1:26–30 **102** (= **17** x 6) words and **32** words after *atnach*
 - 1:24–31a **102** (= **17** x 6) words before *atnach*
 - 1:29–31b **52** (= **26** x 2) words before *atnach*
 - 1:14–31 **170** (= **17** x 10) words before *atnach*

Observations

1. The seven strophes in Gen 1:14–31 may be outlined in a menorah pattern, which is determined primarily on prosodic grounds in terms of the inverse concentric arrangement of syntactic accentual-stress units, rather than content as such—though repetition of themes underscores the concentric structure found in the prosodic analysis to some degree.

Second 3-Day Panel: Creation of Luminaries and Living Creatures **Gen 1:14–31**

A	St 1:	Creation of lights in the dome of the sky—solar time begins	[7.10]	1:14–15
B	St 2:	Creation of the sun, moon and stars— <i>day four ends</i>	[12.11]	1:16–19
C	St 3:	Creation of fish and birds— <i>day five ends</i>	[16.14]	1:20–23
X	St 4:	Creation of land animals after their kind	[4.4]	1:24
C'	St 5:	Creation of wildlife, herd-animals, and human beings	[14.16]	1:25–27
B'	St 6:	God's blessing: be fruitful, fill the earth and subdue it	[11.12]	1:28–29
A'	St 7:	Provision of green plants as food for animals— <i>day six ends</i>	[10.7]	1:30–31

2. Numerous scholars have observed that the six working days of creation are arranged in parallel 3-day “panels” as follows:

Panel One: “Universe as a Building”

Day 1	Light (“The Big Bang”—1:3–5)
Day 2	Sky dome—separating waters (1:6–8)
	Sky
	Seas
Day 3	Earth appears as dry land (1:9–10)
	Vegetation appears on earth (1:11–13)

Panel Two: “The Furniture”

Day 4	Lights: sun, moon & stars (1:14–19)
Day 5	First inhabitants on earth (1:20–23)
	Fish
	Birds
Day 6	Animals (1:24–26) & humans (1:27–29)
	Vegetation as food for animals (1:30–31)

The physical domains of the universe and immovable objects on earth are created in the first three days. In the second three days, the movable things are created for each of the days in the first “panel” of three days. The chiasmic reversal of the products of the middle days adds to the symmetry, as Mark Thronveit has noted (*The Genesis Debate: Persistent Questions about Creation and the Flood*, ed. R. Youngblood [New York: Thomas Nelson, 1986], p. 46).

3. In terms of the 275 words in Genesis 1:14–31, the **arithmological center** falls on the second occurrence of the word **לְמִינֵהּ** (“its kind”) in 1:24 immediately before *atnach*. The initial **concentric compositional formula** is:

$$275 = 137 + 1 + 137 \quad [\text{word count}]$$

$$\text{or: } \mathbf{138 // 138} \quad [\text{word count—with “pivot” included in each half}]$$

$$\{\mathbf{138 = 23 \times 6}\}$$

One candidate for the **meaningful center** is found by adding two words on either side of the **arithmological center**, as follows:

למינה וחיתו ארץ And wildlife of the earth after their kind;
 ויהי כן And it was so.

In this instance, the **concentric compositional formula** becomes:

$$275 = 135 + 5 + 135 \quad [\text{word count}]$$

$$\text{or: } 140 // 140 \quad [\text{word count—with "pivot" included in each half}]$$

The **meaningful center** may be expanded to include 11 words on either side of the **arithmological center**.

24 ויאמר אלהים And God said:
 תוצא הארץ נפש חיה למינה "Let the earth bring forth living creatures after their kind—
 בהמה ורמש Herd-animals and creeping things,
למינה וחיתו ארץ And wildlife of the earth after their kind."

25 ויעש אלהים And God made
 את חית הארץ למינה the wildlife of the earth, after their kind;
 ואת הבהמה למינה ואת כל and herd-animals, after their kind, and everything (else).

In this instance, the **concentric compositional formula** becomes:

$$275 = 126 + \mathbf{23} + 126 \quad [\text{word count}]$$

$$\text{or: } 149 // 149 \quad [\text{word count—with "pivot" included in each half}]$$

4. Summary of the concentric compositional formulae for Gen 1:14–31:

$$275 = 135 + 5 + 135 \quad \text{or: } 140 // 140$$

$$275 = 126 + \mathbf{23} + 126 \quad \text{or: } 149 // 149$$

{with others in between}

$$275 = 15 + 245 + 15 \quad \text{or: } \mathbf{260 // 260}$$

$$275 = 6 + 263 + 6 \quad \text{or: } 269 // 269 \quad \{\text{v. 14a || v. 31b}\}$$

$$148 = 70 + 8 + 70 \quad \text{or: } \mathbf{78 // 78} \quad \text{syntactic accentual-stress units}$$

$$\{\mathbf{78} = \mathbf{26} \times 3\}$$

$$\mathbf{64} = 30 + 4 + 30 \quad \text{or: } \mathbf{34 // 34} \quad \text{briques (primary accentual-stress units)}$$

$$\{\mathbf{64} = \mathbf{32} \times 2 \text{ and } \mathbf{34} = \mathbf{17} \times 2\}$$

5. In the prosodic structure of Jonah 1:1–8 as a whole, the basic building blocks (**briques**) in each poetic **verset** are the **primary syntactic accentual stress units**. These sub-units are delineated by the Masoretes, who marked the boundaries with one of the following:

- **Soph Pasuq** A large colon following a word signifies the end of a verse, which does not always coincide with the end of a sentence.
- **Atnach** A small caret-like mark (like ^) beneath the consonantal text, pointing upward, is used to divide most verses. Its primary importance for our purposes concerns its use in the matter of numerical composition—i.e., the total word-count in each line is divided into the number of words before and after *atnach*.

In the prosodic analysis presented with the translation (above), the presence of these two primary disjunctive markers is indicated with a double slash (//). Gen 1:14–31 has 64 **briques** (primary stress units), 34 of which are marked by *soph pasuq* (18 times, at the end of each verse) and *atnach* (16 times, in each verse, except verses 19 and 23). The boundaries of the 30 remaining **briques** are marked by *revia* (9 times, in verses 14, 21, 24, 25, 26, 28, 29 [twice] and 30), *zaqeph parvum* (15 times, in verses 15, 16, 18, 20 [twice], 21, 22, 24, 25, 26 [twice], 27, 28, 29 and 31), *zaqeph magnum* (verse 14), *geresh* (verse 26), *segolta* (verse 28), *pazer* (verse 21), *tīḫā* (verse 19) and *telisha magnum* (verse 30).

6. The prosodic structure of Gen 1:14–31, in terms of its **briques** (primary syntactic accentual-stress units), may be displayed as follows: ^ represents *atnach*; : represents *soph pasuq*; and † represents all other accent markers.

- I A ¹⁴ wayyō^{mer} ʾēlōhîm † yəhî məʾorōt birqîa^c haššāmayim ləhaḅdîl †
 bēn hayyôm ûbēn hallāylāh ^ wəhāyû ləʾōtōt ûləmôʿādîm ûləyāmîm wəšānîm :
¹⁵ wəhāyû limʾorōt birqîa^c haššāmayim † ləhāʾîr ʿal hāʾāreš ^ wayəhî kēn :
- B ¹⁶ wayyaʿas ʾēlōhîm ʾet šənê hamməʾorōt haggəḏōlîm ^
 ʾet hammāʾôr haggəḏōl ləmemšelet hayyôm †
 wəʾet hammāʾôr haqāṭôn ləmemšelet hallaylāh wəʾet hakkôkəbîm :
¹⁷ wayyittēn ʾōtām ʾēlōhîm birqîa^c hašānayim ^ ləhāʾîr ʿal hāʾāreš :
¹⁸ wəlimsōl bayyôm ûballaylāh † ûləhaḅdîl bēn hāʾôr ûbēn haḥōšek ^
 wayyar^ʾ ʾēlōhîm kî tōḅ :
¹⁹ wayəhî ʿereḅ wayəhî ḥōqer † yôm rəḃîʾ :
- II C ²⁰ wayyō^{mer} ʾēlōhîm † yîsrəšû hammayim šereš nepēš ḥayyāh ^
 wəʿōp yəʿōpēp ʿal hāʾāreš † ʿal pənê rəqîa^c haššāmāyim :
²¹ wayyibrāʾ ʾēlōhîm ʾet hattannînîm haggəḏōlîm ^
 wəʾet kol nepēš haḥḥayyāh hārōmešet † ʾāšer šārəšû hammayim ləminēhem
 wəʾet kol ʿōp kənāp ləminēhū † wayyar^ʾ ʾēlōhîm kî tōḅ :
²² wayəḅāreḅ ʾōtām ʾēlōhîm ləʾmôr ^
 pərû ûrəḅû ûmilʾû ʾet hammayim bayyammîm † wəhāʿōp yireḅ bāʾāreš :
²³ wayəhî ʿereḅ wayəhî ḥōqer yôm ḥāmîšî :

Gen 1:1–29 **153** (= **17** x 9) words before *atnach*
 Gen 1:1–20 160 (= **17** + **23**) x 4 words before *atnach*
 Gen 1:1–22 **169** (= **13** x **13**) words before and 110 (= 55 x 2) words after *atnach*
 Gen 1:1–23 110 (= [**23** + **32**] x 2) words after *atnach*
 Gen 1:1–24 **187** (= **17** x 11) words before *atnach*
 Gen 1:1–25 116 (= [**26** + **32**] x 2) words after *atnach*
 Gen 1:1–26 129 (= [**17** + **26**] x 3) words after *atnach*

In 5 out of 18 of these boundaries (or 27.8% of the time) a multiple of one of the four compositional numbers (**13**, **17**, **23** and **32**) is present. If the numbers 40, 43, 49, 55 and 58 are added, the percentage increases to 55.6% (10 out of 18). This evidence suggests the possibility of deliberate design at the point of the numerical composition of Gen 1:14–31.

8. Determining the details of the musical and literary structures in Genesis calls for input on the part of others in the Word Count Project, as we consider the rhetorical features in greater depth and further information contained in the *te'amim* of this particular text.

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