## Psalm 104- Logotechnical Analysis <br> Guidelines

- Please read the General Introduction as well as the Introduction to Book I and Book IV.
- For common features found in the numerical analysis charts, see the Key to the charts.


## Specific features of Psalm 104

- In the category 'showpiece of numerical composition', Psalm 104 ranks at the top as a real masterpiece. In much the same way as in the sister psalms, Psalms 105 and 106, it has a readily recognizable core: the 102 -word ( $6 \times 17$ ) section vs. 10-23 (Canto II in my division), which may be called its pièce de résistance.
- As in Psalm 106, the direction of address plays an important part in the structuring of the text. The passages containing words addressed to God in particular mark the caesuras in the text, which determine the canticle structure outlined in a menorah pattern.
- In addition, the psalm has a little menorah at the beginning and at the end, giving support to the overall menorah framework, and symbolizing the fullness of God's creation, as well as the 7 days in the Story of Creation in Genesis 1 . Note also the 7 cantos, the 35 ( $5 \times 7$ ) verselines and the relatively high frequency of the number 7 and its multiples.
Strophic structure - Canto/Stanza boundary: || Canticle boundary: |
- Van der Lugt: 1-2, 3-5, 6-7, 8-9 | 10-12, 13-15, 16-18 || 19-20, 21-23 | 24-26, 27-28, 2930 | 31-32, $33-35 \mathrm{c}$ ( 2 cantos, 5 canticles, 14 strophes 35 verselines, 78 cola - excluding hallelu-yah in v. 35d).
- Fokkelman: 1-2, 3-4 | 5-6, 7-9 | 10-11, 12-13 | 14-15, 16-18 | 19-20, 21-23 | 24-26, 27-28, 29-30 | 31-32, 33-34, 35 ( 7 stanzas with 15 strophes, 36 verselines and 80 cola including hallelu-yah, and taking v. $35 \mathrm{c}-\mathrm{d}$ as a separate verseline and v. 26 as a tricolon).
- Labuschagne: 1, 2-3, 4-5 | 6-7, 8-9 || 10-11, 12-13 |14-15, 16-18 | 19-20, 21-23 || 24-26, 27-28, 29-30 | 31-32, 33-34, 35 ( 3 cantos, 7 canticles in a menorah pattern, with 17 strophes, 35 verselines and 78 cola - excluding the 2 -word hallelu-yah).


## Logotechnical analysis

- Columns $\mathbf{a}$ and $\mathbf{b}$ show the number of words before and after the atnach.
- Column c: words addressed to God; d: words spoken about God.
- The numbering of the verselines is shown in brown.

|  |  |  | otal |  | b |  | c d |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 4 | 4 |  |  | 4 |
| $1 b$10 | - |  | 4 | 4 |  |  | 4 |
|  |  |  | 3 |  | 3 |  | 3 |
|  | Strophe 1 | Total, v. 1 | 11 | $=8$ | + 3 | $=$ | $7+4$ |
|  |  | Total, v. 1b | 7 | $=4$ | + 3 |  | $7+0$ |
| 2 |  | ה־־זוֹר | 3 | 3 |  |  | 3 |
|  |  | וֹה | 3 |  | 3 |  | 3 |
|  |  | Total, v | 6 | $=3$ | + 3 | $=$ | $0+6$ |
|  |  | Total, v. | 17 | $=11$ | + 6 | $=$ | $7+10$ |
|  |  | Total, v. 1b | 13 | $=7$ | + 6 | $=$ | $7+6$ |
| 3 |  | קר | 3 | 3 |  |  | 3 |
|  |  |  | 3 | 3 |  |  | 3 |
|  | רוּדַּ |  | 4 |  | 4 |  | 4 |
|  |  | Total, v | 10 | $=6$ | + 4 | $=$ | $0+10$ |
|  | Strophe 2 | Total, v. 2 | 16 | $=8$ |  | $=$ | $0+16$ |
|  |  | Total, v. 1 a | 27 | $=17$ |  | $=$ | $7+20$ |
|  |  | Total, v. 1b | 23 | $=13$ | + 10 | = | $7+16$ |

4


Strophe 3
Total, v. 4-5
Canticle l. 1 Total, v. 1a-5

| 6 | 3 | 3 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 4 |  | 4 |  |  |
| 7 | 3 | 3 |  |  |  |
|  | 4 |  | 4 |  |  |
|  | 14 | $=6$ | + 8 | $=1$ | + 0 |
| 8 | 4 | 4 |  |  |  |
|  | 5 |  | 5 |  |  |
| 9 | 4 | 4 |  |  |  |
|  | 4 |  | 4 |  |  |
|  | 17 | $=8$ | + 9 | $=1$ | + 0 |
|  | 31 | $=14$ | + 17 | $=3$ | + 0 |
|  | 72 | $=38$ | + 34 | = 3 | + 34 |
|  | 68 | = 34 | $+34$ | = 3 | + 30 |



Strophe 6 Total, v. 10-11


Strophe 7 Total, v. 12-13
Canticle II. 1 Total, v. 10-13


 ַישַּלוּ הָרִים יֵירדדוּ בְקזעוֹתּ
אֶל־מְקוֹם זֶה יָסַדְדָּתָּ לָהֶם:


Strophe 5
Total, v. 8-9
Canticle I. 2
Canto I
Total, v. 6-9
Total, v. 1a-9

10 בֵּין הָרִים יְהַלֵּכוּן:

Total, v. 10
יַשְׁקוּ כָּלֹלֹחַיְתוֹ שָּדָדים


Total, v. 11

ִִִבֵּין עֲבָאיִּם יִתְּנוּקוֹל:
Total, v. 12

Total, v. 13

Total, v. 1a-13
Total, v. 1b-13 Total, v. 1b-9103 $\underline{3} \begin{array}{r}3 \\ 6=3+3=0+6\end{array}$ $\begin{array}{ll}11 & 4\end{array}$ $3 \quad 3 \quad 3$ $\begin{aligned} 7 & =4+3=0+7 \\ 13 & =7+6=0+13\end{aligned}$ 12

4

13
3

| 4 |  | 4 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 7 | $=3$ | + 4 | $=0$ |  | + 7 |
| 15 | $=7$ | + 8 | $=0$ |  | 15 |
| 28 | $=14$ | + 14 | $=0$ |  | 28 |
| 100 | $=52$ | + 48 | $=38$ |  | 62 |
|  | = 48 | + 48 |  |  |  |



Strophe 13 Total, v. 27-28
Total, v. 25-28



Total, v. 29
Total, v. 23-29


Total, v. 30
Strophe 14 Total, v. 29-30
Canto III. 1 Total, v. 24-30
31
 יִשְׁגַחּ
See Observation 10
Total, v. 31
Total, v. 22-31


Total, v. 32
Strophe 15 Total, v. 31-32


Total, v. 33
Total, v. 29-33
34
34

Total, v. 34
Strophe 16 Total, v. 33-34
Total, v. 25-34

| 24 | 4 | 4 |  | 4 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 3 | 3 |  | 3 |  |
|  | 3 |  | 3 | 3 |  |
|  | 37 | $=20$ | $+17$ | $=10$ | $+27$ |
| 25 | 5 | 5 |  | 5 |  |
|  | 4 | 4 |  | 4 |  |
|  | 4 |  | 4 | 4 |  |
| 26 | 3 | 3 |  | 3 |  |
|  | 5 |  | 5 | 5 |  |
|  | 31 | $=19$ | + 12 | $=31$ | + 0 |
|  | 58 | $=32$ | $+26$ | $=31$ | $+27$ |
| 27 | 3 | 3 |  | 3 |  |
|  | 3 |  | 3 | 3 |  |
|  | 6 | $=3$ | $+3$ | $=6$ | $+0$ |
| 28 | 3 | 3 |  | 3 |  |
|  | 4 |  | 4 | 4 |  |
|  | 7 | $=3$ | + 4 | $=7$ | + 0 |
|  | 13 | $=6$ | + 7 | $=13$ | + 0 |
|  | 34 | $=18$ | $+16$ | $=34$ | $+0$ |
| 29 | 3 | 3 |  | 3 |  |
|  | 3 | 3 |  | 3 |  |
|  | 3 |  | 3 | 3 |  |
|  | 9 | $=6$ | + 3 | $=9$ | + 0 |
|  | 59 | $=34$ | + 25 | $=53$ | + 6 |
| 30 | 3 | 3 |  | 3 |  |
|  | 3 |  | 3 | 3 |  |
|  | 6 | $=3$ | $\begin{array}{r} \\ +3 \\ \hline\end{array}$ | $=6$ | + 0 |
|  | 15 | $=9$ | + 6 | $=15$ | + 0 |
|  | 59 | $=34$ | + 25 | $=59$ | $+0$ |
| 31 | 4 | 4 |  |  | 4 |
|  | 3 |  | 3 |  | 3 |
|  | 7 | $=4$ | +3 + | $=0$ | + 7 + |
|  | 78 | $=44$ | $+34$ | $=59$ | $+19$ |
| 32 | 3 | 3 |  |  | 3 |
|  | 3 |  | 3 |  | 3 |
|  | 6 | $=3$ | + 3 | $=0$ | + 6 |
|  | 13 | $=7$ | + 6 | $=0$ | $+13$ |
| 33 | 3 | 3 |  |  | 3 |
|  | 3 |  | 3 |  | 3 |
|  | 6 | $=3$ | + 3 | $=0$ | + 6 |
|  | 34 | $=19$ | $+15$ | $=15$ | $+19$ |
| 34 | 3 | 3 |  |  | 3 |
|  | 3 |  | 3 |  | 3 |
|  | 6 | $=3$ | + 3 | $=0$ | + 6 +12 |
|  | 12 | $=6$ | + 6 | $=0$ | + 12 |
|  | 74 | $=40$ | $+34$ | $=49$ | + 25 |



* The two $2^{\text {nd }}$ person forms in vs. 13 and 20 appearing in a passage spoken about God, vs. $10-23$, may not necessarily be changed to $3^{\text {rd }}$ person. They can be maintained, standing out as a rhetorical device for enclosure. In any case, I regard the whole passage, consisting of 102 ( $6 \times 17$ ) words, as spoken about God (Column d).


## Observations

1. The call to praise at the end, הַלְלוּיִיָה, 'Praise Yah!", stands outside the poetic body of the psalm. Therefore, I shall register its presence, but leave it out of consideration in the logotechnical analysis of the psalm. This stereotyped call occurs no less than 23 times in the Psalter: $4 x$ in Book IV (104:35; 105:45; 106:1 and 48) and 19x in Book V. Irrespective whether it features at the end and/or at the beginning of a psalm, it serves, in my opinion, primarily as a linking device to join successive psalms. In the recital of the psalms in the liturgy, it functions as a continuous call to praise, a crescendo ultimately culminating in Psalm 150.
2. In terms of its 269 words in vs. 1a-35c, the arithmetic centre of the psalm is constituted by the word 'her house', in v. 17b $(269=134+1+134)$, but at the same time by the 13 words in vs. $17-18(269=128+13+128)$. The latter centre is emphasized by the arithmetic centre on poetic level, the middle verseline, v. 18, flanked by 17 verselines on either side ( $35=17+1+17$ ).
The two centres remain the same when we exclude the 4 -word introductory and concluding calls in v . 1a and v . 35 c , which do not strictly belong to the body of the psalm either $(261=130(5 \times 26)+1+130(5 \times 26)$ and $261=124+13+124)$.
We may regard these 13 words as the meaningful centre, although it is not clear what their significance is. In any case, it does not contain the gist of the psalm. Therefore, the broader context of the presumed meaningful centre, vs. 14-18, would be a more plausible candidate: Canticle II.2, the first part of the passage dealing specifically with the world of humankind. What is more, it coincides precisely with the pivot of the menorah - see the next Observation.

By including the hallelu-yah in the word-count, Christensen fails to see the obvious arithmetic centre on word level. He finds an 11-word mechanically achieved 'meaningful' centre, consisting of the last 5 words of $v$. 17 and the 6 words of $v$. 18. In my judgement, this truncated phrase cannot possibly pass as 'meaningful centre', because it violates syntax and grammar.
3. As in Psalm 102, the key to understanding the structure of Psalm 104 lies in taking seriously the change in the direction of address. Most modern versions leave it totally out of consideration, glossing it over, probably to achieve smooth reading. However, this is not what the author intended: he deliberately used it as a structuring device to mark the natural breaks in the text.
On this basis, I divide the psalm in broad outline as follows (as in the chart, the $2^{\text {nd }}$ person passages are in green):
v. 1a Introductory call to praise
v. 1b-c Words addressed to God: lauding his majesty and splendour
vs. 2-5 Words about God: articulating his glory in a universal context
vs. 6-9 Words addressed to God: your works regarding the the waters
vs. 10-23 Words about God: what he does with water to generate life on earth
vs. 24-30 Words addressed to God: comprehensive survey of the Creator's acts
vs. 31-35b Words about God: concluding laudation
v. 35c Concluding call to praise.

Logotechnically, we can group these components together into three cantos:
Canto I vs. 1b-9 $68(4 \times 17)$ words, with 34 before and 34 after atnach
Canto II vs. 10-23 $102(6 \times 17)$ words in total
Canto I-II vs. 1b-23 $170(10 \times 17)$ words in total
Canto III vs. 24-35b 91 words in total.
The significant multiples of the divine name numbers in Cantos I and II clearly indicate that the 4 -word opening and concluding calls ( v . 1a and v .35 c ) were left out of consideration when the poem was numerically composed. They have the apparent function as a device of inclusion and of linking Psalm 104 to Psalm 103.

The three cantos logically divide into $\mathbf{7}$ canticles outlined in a menorah pattern:

| 1a Introductory call to praise |  |  | 1 colon |
| :---: | :---: | :---: | :---: |
| Cantic. I. 1 vs. 1b-c+2-5 | 3 st | 5 verselines | 11 cola |
| Cantic. I. 2 vs. 6-9 | 2 strophes | 4 verselines | 8 cola |
| Cantic. II. 1 vs. 10-13 | 2 strophes | 4 verselines | 8 cola |
| Cantic. II. 2 vs. 14-18 | 2 strophes | 5 verselines | 12 cola |
| Cantic. Il. 3 vs. 19-23 | 2 strophes | 5 verselines | 10 cola |
| Cantic. III. 1 vs. 24-30 | 3 strophes | 7 verselines | 17 cola |
| Cantic. III. 2 vs. 31-35b | 3 strophes | 5 verselines | 10 |
| v. 35c Concluding call to praise |  |  | 1 colon |
| Grand total | 17 strophes | verselines | 78 cola |

The pivot of the menorah is constituted by Canto II.2, vs. 14-18, the passage in which humankind is mentioned for the first time: "He (God) causes the grass to grow for the cattle, and plants for humans to cultivate" (v. 14).
Cantos II. 2 and II. 3 taken together, vs. 14-23, deal more specifically with the world shared by humanity with other creatures. This larger passage is significantly enclosed by the words הָאָּדָם, 'עָּדָה , 'humankind', and 'work', at the beginning (v. 14) and אָדָם, 'man', and שְלֹרָה, 'work', at the end (v. 23).
Strikingly, the author refers to humans only in a casual way, suggesting that the human race is but one of the many forms of life on earth, in contrast to humankind's high-ranking position in Psalm 8. This is in accordance with the humble state of humankind in Genesis 2, being destined to cultivate and care for God's garden. In Ps. 104:14 the poet explicitly mentions man's cultivating task, and at the end of Canto II, he specifically refers to his 'work' and his 'labour' (v. 23).
4. In addition to the major menorah, there is another (smaller) one, in Canto I, in vs. 2-4. After the introductory address to God (vs. 1b-c), lauding his majesty and splendour, the author proceeds to articulate God's presence in the universe, which manifests itself in 7 acts arranged in a menorah pattern. The seven preparatory acts by the Creator, in view of his creative deeds, are outlined as follows:

He covered himself in light (2a)
He spread out the heavens (2b)
He laid the beams of his dwelling on the waters (3a)

## He made the clouds his chariot (3b)

He rode on the wings of the wind (3c)
He made the winds his messengers (4a)
He made fire and flame his ministers (4b).
This little menorah has its counterpart in vs. 26-30 - see Observation 8 below. It is important to note that the author consistently used participles throughout the menorah. This is a clear indication that this verbal form was chosen to ensure the 7 acts constituting the menorah. To describe the eighth act, mentioned in the v. 5, he used a finite verb, יָּדָד, 'to fix': "He fixed the earth on its foundations so that it will never be moved". In this way, he set the stage for the creational process to begin.
The fact that the reference to the clouds is positioned at the centre of the menorah is certainly not a matter of coincidence. The clouds, as the heavenly source of water, occupy pride of place, because they are of paramount importance for the creation of life on earth. God's initial steps to this end are described in Canticle I. 2 (vs. 6-9).
5. Returning for a moment to vs. $1 \mathrm{a}-5$, it is worth noting how the divine name number 17, as well as the kabod number 23, are woven into the text (see the chart):
vs. 1a-2 $\quad 17$ words in total
vs. 1a-3 $\quad 17$ words before atnach
vs. 1a-5 $34(2 \times 17)$ words spoken about God, and 7 addressed to him
vs. 1a-5 $\quad 17$ words after atnach
vs. 1b-3 $\quad 23$ words in total, the numerical value of כבוד, 'glory' (v. 31a).
Although the word 'glory' does not actually occur, its presence is strongly suggested by the synonyms 'majesty' and 'splendour' (v. 1c).
The 23 words in Canticle I.1, vs. 1b-3, have their counterpart at the end: the 32 words of Canticle III.2, vs. 31-35b.
The word הָאָדָם, 'humankind' (14b), has the same numerical value, 23, but this may just be a lucky coincidence. More importantly, the complete kebod-YHWH formula, $58=32+26$, strikingly appears in vs. 20-26. It strongly underscores the idea of God's presence in the universe, and in all that is said in the psalm. See in the General Introduction, the paragraph "Special patterns".
In passing, I may draw attention to the fact that I do not consider the two kabod numbers 23 and 32 regular compositional numbers in the same sense as the two divine name numbers. They feature only in contexts in which God's presence is explicitly mentioned or subtly implied. In that case, their function is to give numerical support to the content of such texts. Their appearance outside these texts should be regarded as a matter of chance.
Treating them as regular 'compositional numbers', as Christensen persistently does, significantly increases the chances of always finding a 'compositional number'. This causes a high inflation rate of 'sacred numbers', which justifies the reproach on the part of sceptics that "you can always find a sacred number".
I have addressed the matter in more detail in the General Introduction, under the paragraph "Special patterns". See also my remarks in the "Key to the Charts".
6. Canticle I.2 (vs. 6-9), the first major address to God, consists of two strophes: vs. 6-7, with 14 words, and vs. 8-9, with 17. These two numbers strikingly recur in the compositional formula of the canticle: $31=\mathbf{1 4 a}+\mathbf{1 7 b}$.
Juxtaposing the compositional formulas of Canticles I. 1 and I. 2 (vs. 1b-9) reveals a significant overall compositional formula:
vs. $1 \mathrm{~b}-5$
$37=20+17$
vs. 6-9 $\quad 31=14+17$
vs. $1 \mathrm{~b}-9 \quad 68=34+34$.
This is hard evidence that this section of the psalm is a well-designed literary unit.
7. Let us now consider Canto II (vs. 10-23), the major $3^{\text {rd }}$ person passage, which may be called the pièce de résistance of the psalm. It consists of $102(6 \times 17)$ words and deals with God's accomplishment of his creation by generating different forms of life based on the prerequisite for life, water. In terms of composition, it means that here the author elaborates on the leading theme, which he broached and articulated in the address to God in vs. 6-9.
Canto II is in three parts, which I call Canticles II.1, II.2, and II.3:
II.1, vs. 10-13 God made springs gush forth to give drink to beasts
II.2, vs. 14-18 God provided grass for cattle and food and drink for mortals
II.3, vs. 19-23 God created the moon and the sun to mark seasons and time.

The divine name numbers $\mathbf{1 7}$ and $\mathbf{2 6}$ are woven into the fabric of the text of Canto II in the following fashion:
vs. 15-18 $\quad 17$ words before atnach
vs. 16-19 26 words in total
vs. 16-20 17 words before atnach
vs. 17-21 $\quad 34$ words in total, with 17 before and 17 after atnach
vs. 18-22 $\quad 17$ words after atnach
vs. 19-23 $\quad 17$ words after atnach.
Note that Canto II is linked to Canto I by their total number of words: 170 (10-17).
8. Canto III divides into two distinct parts: Canticle III. 1 and Canticle III.2:

$$
\begin{array}{ll}
\text { vs. 24-30 } & \text { Comprehensive survey of God's acts (addressed to God) } \\
\text { vs. 31-35b } & \text { Concluding laudation (spoken about God). }
\end{array}
$$

Canto III, consisting of 59 words, with $34(2 \times 17)$ before atnach, is joined to the preceding Canto II by the following significant numerical devices:
vs. 20-26 58 words: $\mathbf{3 2 a}+\mathbf{2 3 b}$, the double kabod formula
vs. 25-28 $34(2 \times 17)$ words in total
vs. 23-29 $34(2 \times 17)$ words before atnach
vs. 22-31 $\quad 78(3 \times 26)$ words in total, with $34(2 \times 17)$ after atnach
vs. 29-33 34 words in total, with 19 before and 15 after atnach,
vs. 25-34 $34(2 \times 17)$ words after atnach
vs. 31-35b $\quad 32$ words in total (compare the 23 words in vs. $1 \mathrm{~b}-3$ ).
In terms of content, v. 35a-b is clearly a coda: it refers back to the resolve of the speaker in Psam 101:8!
For the significance of the mysterious compositional formula $\mathbf{3 4}=19+15$, appearing also in Ps. 81:9-12, Ps. $95: 8-11$, Ps. 105:40-44, Ps. 106:23-27, and in Deuteronomy, see Observation 3 in my Analysis of Psalm 95.
9. A closer examination of Canticle III. 1 (vs. 24-30), the final address to God, reveals that it divides into two parts, Strophe 12 and Strophes 13-14:
vs. 24-26 a recapitulation of all God's works on earth and in the sea
vs. 27-30: the absolute dependence of all living beings on God.
Characteristic of the latter section is the use of a menorah pattern for the listing of God's acts to sustain life - which is very reminiscent of the menorah in vs. 2-4:

You provide them with their food when it is due (27b)
You give to them; they gather up (28a)
You open your hand; they eat their fill (28b)

## You hide your face; they are dismayed (29a)

You take away their spirit; they die and return to dust (29b)
You send forth your spirit; they are created (30a)
You renew the face of the ground (30b).
10. Finally, let us examine the $7^{\text {th }}$ canticle (III.2), vs. 31-35b, the concluding laudation. It is made up of 32 words, which is the decimal value of כָ Its decimal value complements its positional value of $23,(11+2+6+4)$, which we encountered in the initial anticle. The decimal value relates to the numerical value of the letters as numerals; the positional value is based on the place of the letters in the alphabet. See the General Introduction,"The name YHWH woven into the fabric of the text."
Occurring right in the very first colon (v. 31a), כָבוֹד is obviously a keyword, because this canticle deals with the everlasting glory of God in the world.
The passage is numerically linked to the preceding sections by the use of the compositional formula of vs. 22-31: $78(3 \times 26)=44+34(2 \times 17)$, and by that of vs. 29-33: $\mathbf{3 4}=\mathbf{1 9}+\mathbf{1 5}$, as well as by that of vs. $25-34: 74=40+34$.
The other significant compositional formula is that of vs. $33-35 \mathrm{c}$, featuring the positional value of kabod: $\mathbf{2 3}=17+6$.
11. The name יהוה occurs altogether 9 times in the psalm (1a, 1b, 16a, 24a, 31a, 31b, $33 a, 34 b$, and 35 c ). Note the cluster of four occurrences in the concluding Canticle (vs. 31-35b). Excluding the 2 instances in the enclosure device ( 1 a and 35 c ), we find 7 occurrences. This is additional evidence that the psalm was composed with the device for inclusion being left out of consideration.
This sevenfold pattern does not only underscore the three menorahs, it also emphasizes in its own way the idea of the 'fullness' of God's creation. In addition, it symbolizes the 7 days of Creation of Genesis 1.

