

# The Bible as a High-Grade Literary Work of Art

## Investigating the Numerical Structure of the Biblical Text

Having introduced the reader in the previous chapters to the high frequency in the occurrence of the numbers 7, 17, and 26, I now intend to illustrate the structural use of these numbers which gave the biblical texts their characteristic form as numerical compositions. The numerical principles employed by their authors played a crucial role in the literary architecture of the texts and added considerably to making the Bible a high-grade work of art. The artful hand of the master composers can be detected most particularly in the refined numerical structure of the text.

When I qualify the Bible as “a work of art,” I am not saying anything new, since this would be endorsed by many readers of the Bible, biblical scholars, and literary experts before me, who have discovered and come to appreciate its great literary qualities. In this respect, I have in mind specific scholars who favor a synchronic approach to the text, such as L. Alonso-Schökel and W. Richter of the “aesthetic school”; M. Weiss, who advocates a “total interpretation” from the standpoint of modern literary theory; J. Muilenburg and other advocates of “rhetorical criticism”; and the exponents of the so-called “Amsterdam school” and related circles engaged in stylistic and structural analysis.<sup>1</sup>

One of the basic principles held by the growing number of scholars practicing these new methods of study is the compositional unity of the biblical writings—as opposed to the dissecting diachronic approach to the biblical texts by scholars who cling to the “historical-critical” method in its old-fashioned form. Scholars of the new trend in text analysis maintain that the biblical texts, in the form they were handed down, are not the result of a haphazard formation process that came to a halt by chance, but were deliberately designed compositions. I am convinced that numerical structural analysis can both underscore and verify this cardinal tenet.

In what follows below, I shall demonstrate this conclusion by probing and revealing the numerical secrets of random samples of texts. At the same time, I shall introduce the reader to the basic principles of logotechnical or numerical structural analysis. I shall perform this within the historical context of the discipline of historical-critical text analysis, and shall therefore discuss the work of the two pioneers in this respect, Oskar Goldberg and Claus Schedl.

The numerical structural analysis of the biblical writings should not be considered a separate independent new method of studying the form of the text beside or opposite to other methods. Since the biblical writings are numerical compositions, the form of which is governed by certain numbers, the study of the form of the text should include the study of its numerical aspects. Therefore, the logotechnical analysis of a text must be regarded as part and parcel of the “literary-critical method,” of which the primary objective is to study the literary form of a text; that is, the way it is structurally organized. If “literary criticism” is in fact “form criticism” in this sense, “numerical criticism” should be considered supplemental and integral to it, as I have argued and maintained from the very beginning when I introduced numerical structural analysis and integrated it into my own scholarly research.<sup>2</sup>

In my view, “literary criticism,” the classic method of text analysis, remains the primary and absolutely indispensable way

of analyzing a text and should never be replaced by other methods. Unfortunately, however, in the course of time, literary criticism has failed to address fresh questions and to adapt itself to newer insights. This resulted in one-sidedness and in the discipline getting bogged down in an excessive search for sources and layers. This development gave rise to the emergence of other methods, such as “form criticism,” “rhetorical criticism” and “structural analysis,” often wrongly presented as independent and diametrically different disciplines. But in my view all such methods, including “numerical structural analysis,” should be regarded as supplemental to literary criticism.

### **The Layout Markers in The Hebrew Text of Genesis**

Studying the form of the text, literary criticism, is also concerned with delimiting its “larger” and “smaller” units, the major parts and the sub-sections into which it is divided—to speak in modern terms: its chapters and paragraphs. Detecting the arrangement of a text with respect to its coherent literary units is often of crucial importance in matters of interpretation.

In the layout of the text of the Old Testament handed down in the Leningrad Codex, the oldest complete text of the Hebrew Bible (1008 CE), the Masoretes have preserved a great number of “layout markers” indicating the delimitation of its literary units. Different kinds of larger and smaller open spaces in the text were used as such “paragraph markers”—represented by a *parashah petuchah*, “open *parashah*,” (P) and a *parashah setumah*, “closed *parashah*,” (S) in the printed editions. Unfortunately these layout markers have in general been ignored and are still completely disregarded by the great majority of modern biblical scholars. My experience with the layout markers in the Hebrew Bible has brought to light the fact that the Masoretes have not indicated such markers consistently and fully. They seem to be absent where we would expect them. However, I am convinced that they should never be ignored in

those instances where they do occur. We must keep in mind the fact that the open spaces in the layout of the text have excellent credentials going back to the time of the formation of Scripture and should never be disregarded.<sup>3</sup>

A notorious instance of the disregarding of the masoretic layout markers is the “paragraph marker” between verse 3 and verse 4 of Genesis 2, which has been disregarded by many commentators who think that there is a break between verse 4a and verse 4b. To make matters even worse, the editors of the printed edition, *Biblia Hebraica Stuttgartensia*, have without any justification introduced an open space at this point, which is highly misleading to scholars with no access to Codex Leningrad. There is no doubt at all that the preceding literary unit, Gen 1:1 – 2:3, with its 34 ( $2 \times 17$ ) verses, dealing with the creation of heaven and earth, ends at 2:3. The next section, dealing with the universal (hi)story of heaven and earth, more particularly that of the human race, starts at 2:4, introduced by the *toledoth*-formula: “This is the (hi)story of the heavens and the earth after their creation.” Therefore, Gen 2:4–25 is not “a second creation story” but in fact the first part of the Story of the Garden of Eden (2:4 – 3:24), an insight which has consequences for its interpretation. The masoretic delimitation of 1:1 – 2:3 and 2:4–25 is rightly recognized and followed, for instance, in the *Revised English Bible*.

Another instance is the “paragraph marker” in the Masoretic Text in Job 3 between verse 1 and verse 2, which means that the literary unit dealing with the reaction of Job’s three friends to his bitter plight, starting at 2:11, does not end at 2:13 but at 3:1. The only correct delimitation of this pericope is 2:11 – 3:1. This is corroborated by the numerical analysis, which shows that 3:1 belongs to the preceding section. Let us have a look at the numerical structure of Job 2:11 – 3:1 on the level of words:

verse 11:	The friends come to console him	25	
verse 12:	Their reaction upon seeing him	17	} 34
verse 13:	They wait seven days in silence	17	
3:1:	Job breaks the silence and speaks	9	} 26
Total:		68	

The 9 words of 3:1 together with the 17 of 2:13 total 26, which demonstrates numerically that 3:1 belongs to the preceding section. This is underlined by the syntactical analysis on the basis of “main clause” and “subordinate clause,” which reveals that the author has arranged his text in such a way that there are exactly 52 (2×26) words in the main clauses. Finally, it is important to note that the stereotyped introductory formula in 3:2, “And Job answered and said,” introducing Job’s speech, as in 6:1; 9:1; 12:1; etc., clearly indicates the beginning of a new pericope.

Returning to the book of Genesis, let us compare the occurrence of the *toledoth*-formula of Gen 2:4 with the same type of formula in 11:27, which marks the actual starting point of the Abraham cycle: “This is the (hi)story of Terah.” For the interpretation of the Abraham narrative, it is crucial to know that the story starts with a short presentation of the extant tradition about the composition of Abraham’s family and their journey under Terah’s leadership from Ur to Haran to set out for Canaan. Taking his starting point in this tradition, the author of the Abraham story presented a theological narrative from 12:1 onwards, in which he interprets the intention of Terah to go to Canaan not as a secular enterprise, but as an act of God who called Abraham to guide him to the land he promised him.

My investigations into the use of the main layout marker, *parashah petuchah*, in the book of Genesis revealed that the book is divided into five main sections and 43 (17 + 26) sub-sections that are quite different in length. This division of the text partly overlaps the structure based upon the *toledoth* formulas, which means that the arrangement of the text visible in the layout rests upon a different conception of the structure of the contents. Whatever this conception may be, the five main sections

are undoubtedly based upon the narrative cycles pertaining to the principal phases in history.

1. Creation
2. Primeval times
3. The time of Abraham
4. The time of Isaac/Jacob
5. The time of Joseph

In any case, this arrangement of the text clearly shows the structural use of the divine name numbers 17 and 26.<sup>4</sup>

Main sections	Sub-sections	Total number of Sub-sections
1:1 – 2:3	Creation	7
2:4 – 10:32	Primeval cycle	10
<b>11:1 – 25:18</b>	<b>Abraham cycle</b>	<b>9</b>
25:19 – 36:43	Jacob cycle	7
37:1 – 50:26	Joseph cycle	10

} 17 } 26  
 } 17 } 26

There are:

- ▶ **7 subsections in 1:1 – 2:3:** 1:1–5, 6–8, 9–13, 14–19, 20–23, 24–31; 2:1–3.
- ▶ **10 in 2:4 – 10:32:** 2:4 – 3:21; 3:22 – 4:26; 5:1–20, 21–24, 25–27; 5:28 – 6:4; 6:5–8; 6:9 – 9:17; 9:18–29; 10:1–32.
- ▶ **9 in 11:1 – 25:18:** 11:1–9; 11:10 – 12:9; 12:10 – 13:18; 14:1 – 17:27; 18:1 – 21:21; 21:22–34; 22:1–19; 22:20 – 24:67; 25:1–18.
- ▶ **7 in 25:19 – 36:43:** 25:19 – 32:3; 32:4 – 34:31; 35:1–8, 9–22, 23–29; 36:1–30, 31–43.
- ▶ **10 in 37:1 – 50:26:** 37:1–36; 38:1 – 40:23; 41:1 – 44:17; 44:18 – 46:27; 46:28 – 47:31; 48:1–22; 49:1–4, 5–12, 13–26; 49:27 – 50:26.

The function of the divine name numbers seems to be that they express the presence of God in all phases of history. The Abraham cycle, with its nine subsections, which is in the center of the five main sections, appears to be the pivotal point in this arrangement of the text. These central nine subsections, together with the 17 before the flood total 26. And together with the 17 in the Isaac-Jacob and Joseph cycle, they once again total 26.

These three examples must suffice to illustrate the importance of the layout markers and the stereotyped formulas in the text of the book of Genesis. Needless to say, what is true about Genesis also applies to the other books of the Old Testament.

### **The Numerical Architecture of The Hebrew Bible Rediscovered**

The credit for the first attempt in modern times to draw attention to the numerical aspects of the Hebrew Bible must go to the Jewish scholar Oskar Goldberg, who presented his view of the Pentateuch as a numerical composition in 1908. On the very first page he states:<sup>5</sup>

The Pentateuch is from the beginning to the end a numerical system, whose basic numbers derive from the divine name YHWH. This numerical system presents itself primarily in the contents of the text and subsequently in its style up to its most refined finesses, in fact in the entire architecture of the text divided in paragraphs, verses and parts of verses. It governs the words, determines the number of letters and becomes manifest in their numerical values as well, while the combination of these factors exhibits the fixed principle of one single number. Therefore the Pentateuch should be regarded as the unfoldment of this basic number, as the name YHWH being unfolded in a writing-in-numbers.

In order to substantiate his thesis, he studied two passages in search of their numerical aspects: the genealogy of Shem in Gen 10:21–32, and the story of the fight against Amalek in Exod 17:8–16. He discovered that the eleven verses of Gen 10:21–32 consists of 104 words, a multiple of the divine name number 26 ( $4 \times 26$ ). Having counted the letters, he found 390, which is another multiple of 26 ( $15 \times 26$ ). It appeared that there were 26 descendants of Shem. He computed the numerical values of their names and found that the first 13 names

total 3588 ( $138 \times 26$ ) while the names of the 13 sons of Joktan add up to 2756 ( $106 \times 26$ ).

He counted the words of the nine verses of Exod 17:8–16 and found that they total 119, which is a multiple of the other divine name number:  $7 \times 17$ . The number of letters appeared to be 449, which is not a multiple of 17, but the sum of the digits ( $4+4+9$ ), he noted, adds up to 17.

In addition to the numerical features of the two passages in question, which he brought to light, he drew up a long list of occurrences of the number 7 in the Pentateuch (pages 31–42). This impressive list together with the data I have referred to above should have been sufficient to demonstrate the use of the numbers 7, 17, and 26 in the Pentateuch and to underscore Goldberg's thesis. The essence of his thesis, that the Pentateuch is a numerical composition governed by the number 7 and the two divine name numbers, was clear enough to arouse at the least the interest of some biblical scholars for the numerical aspects of the Pentateuch. Nonetheless, his work appears to have been completely ignored within the main stream of scholarly research at that time. In a careful review of a number of journals from the years after 1908, I could not find any trace of, or reaction to his book.<sup>6</sup>

We may wonder what went wrong. In my opinion, the main reason biblical scholars did not respond to Goldberg's suggestion that the Pentateuch was a designed composition, and therefore a unity from a literary point of view, was the fact that this was not a welcome message in scholarly circles at the beginning of the twentieth century. During those days, "source-analysis," the current paradigm for explaining any "abnormalities" in the texts, reigned supreme. Scholarly research had a one-sided diachronic approach to the text that concentrated on the search for secondary additions to, and sources behind the text. Most scholars were simply not interested in an alternative approach and turned a blind eye to the possibility that the text could be a compositional unity. Moreover, the deep respect for the Masoretic Text shown by Goldberg did not square with the views of



the champions of textual criticism of his times who strove to establish the “original text,” which was obviously not the Masoretic Text. The time was not ripe for a synchronic approach to the text, let alone for (numerical) structural analysis based upon a high regard for the masoretic textual tradition.

Another reason why not one single scholar picked up the gauntlet or gave evidence of appreciating the essence of Goldberg’s thesis, is the fact that he got bogged down in typical kabbalistic exercises and led his readers away from the text into the labyrinth of the kabbalah. To give an example: the numerical value of the first 13 names of the descendants of Shem is, as we have seen,  $138 \times 26 = 3588$ , while the names of the 13 sons of Joktan add up to  $106 \times 26 = 2756$ , together:  $244 \times 26 = 6344$ ; the sum of the digits of 6344 is  $6+3+4+4 = 17$ ; moreover, the sum of the digits of the numerical values of the first 13 names is 177, and that of the 13 names of the sons of Joktan 218; adding up the digits of the two numbers 177 and 218 one gets  $1+7+7 = 15$  and  $2+1+8 = 11$ ; the numbers 15 and 11 represent the numerical value of YH (15) and WH (11). He also reduced the larger numbers in his numerical system not only to the two divine name numbers but ultimately to “the one and only basic number” 8 (“*die eigentliche und alleinige Grundzahl*,” page 10), which is constituted by both 17 and 26 ( $1+7=8$  and  $2+6=8$ ).

It was such exercises in higher kabbalistic mathematics that made him fail to draw the attention of the scholarly world to the numerical aspects of the biblical writings. Deterred by Goldberg’s numerical acrobatic feats, his fellow scholars grasped his kabbalistic approach as a pretext to disregard his entire work and, what is more, to ignore the essence of his thesis. What they did not realize, however, was that they were “throwing the baby away with the bathwater.”

Another factor that contributed to the reluctance, or even aversion, of the scholarly world to respond to Goldberg’s work could have been the commotion at the turn of the century

caused by Ivan Panin, who claimed that the use of the number 7 in both Old and New Testament renders the Bible a “mathematical miracle,” which was supposed to prove the divine origin of its text. It is understandable that serious scholars did not want to be associated with this brand of numerology. I shall briefly refer to Panin’s work and that of other champions of this claim and to Goldberg’s position in chapter 7.

More importantly, Goldberg failed to make an impact on biblical scholarship because he failed to demonstrate his claim that the numerical system, governed by the divine name numbers 17 and 26 “presents itself primarily in the contents of the text and subsequently in its style up to its most refined finesses, in fact in the entire architecture of the text divided in paragraphs, verses and parts of verses.” In other words, he did not show how the stylistic organization of the text was structured by these numbers. His preoccupation with medieval kabbalism gave fellow scholars the feeling that they were being led away from the text instead of towards a better understanding of its structure. Goldberg was still a long way from numerical structural analysis. It would take more than fifty years before the study of the numerical aspects of the Bible was liberated from the context of kabbalism, in which it was situated by Goldberg, and before it could become a scholarly enterprise on a scientific basis.<sup>7</sup>

### **The Pioneering Work of Claus Schedl**

Numerical criticism as a new perspective for traditional literary criticism emerged when the Austrian orientalist and biblical scholar Claus Schedl set himself to seriously studying the numerical aspects of the biblical text and initiated logotechnical analysis. He was the one who would open our eyes to the ways in which the texts were given their literary form through the use of symbolic numbers as structuring devices in a variety of compositional models. As I have explained above, he was the person who coined the term “logotechnique” and who

advanced and defended the thesis that the biblical writings are numerical compositions.<sup>8</sup>

His starting point was three principles that are deeply embedded in the Jewish tradition: first, that the letters of the alphabet have numerical values (*gematria*); second, that there is a close relationship between counting and writing; and third, the principle that there is an intimate connection between the biblical texts and counting. Leaving Goldberg's kabbalistic mathematics for what it is, he took his thesis that the Pentateuch is a numerical architecture seriously and set out to prove and substantiate his theory. Regarding it as his special assignment, he embarked upon this endeavor as a lone pioneer, scorned and ridiculed by his colleagues in biblical studies and virtually without any debating partners, except for his students in Graz. He groped his way in a totally uncharted field of study and gradually found a method to chart the numerical aspects of the Bible. By searching and registering its numerical aspects, he tried to sort out and systematize the numerical structures of the texts and to interpret the meaning of the numbers and structures he encountered.

In short, he strove to detect the architectural criteria applied by the biblical writers to give structure to their texts, by counting the number of words in a passage as a whole, in the verses and the two halves into which verses are divided. He was particularly interested in the narrative sections and direct speeches in a text, in the main clauses and subordinate clauses, and in the words describing the acts of the personages figuring in a narrative. In doing so, Schedl laid a preliminary foundation for the numerical structural analysis of biblical texts, which would form, despite its shortcomings, the basis for further research.

From a text-critical point of view it is important to note that Schedl insisted on taking one single text-tradition as the object of his numerical research and that he refrained from resorting to text-critical operations to amend this particular text. For Old Testament study he used the text handed down

in *Codex Leningrad* and for the New Testament *Codex Vaticanus*, which he treated with great respect.<sup>9</sup> In doing so, he avoided the danger of mixing text-traditions—a widely accepted practice in biblical scholarship—and the temptation of choosing variant readings in order to achieve a text conforming to a desired numerical structure, which would of course be detrimental to the credibility of his method.

Another crucial principle for Schedl was his absolute respect for the masoretic division of the text by means of the smaller and larger open spaces, the so-called “paragraph markers,” as they occur in the layout of the text of *Codex Leningrad*. He was convinced that these layout markers were not introduced in the Middle Ages but were already there in the received tradition of the masoretes in Tiberias. Moreover, he believed that the masoretic signs above some letters and words in the text and the indications in the margin had a much deeper significance than scholars were apt to think. Apart from their referring function Schedl reckoned with the possibility that they could have been used to encode some numerical aspects of the text. He was very unhappy with the way in which these signs were brought over in the modern printed editions of *Codex Leningrad* and insisted on studying the codex itself, which the great majority of scholars had not even seen at the time. Unfortunately, owing to his untimely death, he could not continue this line of research further.

His respect for the Masoretic Text tradition arose from his synchronic approach to the text and his conviction that the biblical text in its final form should be the object of our scholarly research, not some supposed earlier stage of it. This made him very critical as regards the current extremely one-sided diachronic approach to the text and the endless search for sources and earlier stages of the text as practised in literary criticism at the time. Schedl did not deny the relevance of a diachronic approach as an important historical discipline, which strictly belongs to redaction criticism. Instead he insisted that such historical research does not fit in the pursuits

of literary criticism, whose sole assignment is to study the form and structure of the text in its final form.<sup>10</sup>

## The Theoretical Foundations Of Schedl's Thesis

In order to substantiate his thesis that the biblical writings are numerical compositions, Schedl studied a number of early Jewish writings, specifically with regard to their numerical aspects, and came to the conclusion that numerical compositions are squarely embedded in Jewish culture.<sup>11</sup> The famous writing *Sefer Yetzirah* "Book of Creation" (first century CE) in which the "32 secret paths of wisdom" consisting of the "10 Sefirot" and the "22 elemental letters" play a significant role, contained the basic principles of Jewish number-mysticism. He regarded the formula  $22 + 10 = 32$  as one of the models used for composing texts.<sup>12</sup>

In addition to studying early Jewish writings in search of the roots of numerical compositions, Schedl paid special attention to the role played by numbers in the mathematical-philosophical-theological worldview of the Pythagoreans and of Philo of Alexandria. This is, according to him, the cultural setting and origin of the theological insight explicitly expressed in the book *The Wisdom of Solomon*, 11:21, *Omnia in mensura et numero et pondere disposuisti*, "You (God) have arranged all things according to measure, number, and weight," which played a crucial role in our culture both in literature and architecture, in art and in music from antiquity till the rise of the romantic movement in the eighteenth and nineteenth centuries.

This is the backdrop of the idea that God as the Great Creator-Craftsman has demonstrated how creative works of art should be accomplished and that he invites us to follow suit in a kind of *imitatio Dei*. This brings to mind the clear analogy between God's creation of the world and the construction of the Tabernacle and its equipment by Moses, which we have noted above in chapter 3 under the heading "Series of Seven in the Tabernacle Laws." It

also reminds us of the instructions God gave Noah for the building of the ark in the Story of the Flood, and God's command to Moses in Exod 25:9 with regard to the construction of the Tabernacle: "Make it exactly according to the design I show you" (see also verse 40). The same idea lies behind the instructions for the building of the Temple of Solomon: "All this was drafted by the Lord's own hand" (1 Chr 28:19). An earthly design should be modeled upon a heavenly plan.<sup>13</sup>

In view of the fact that the peoples in the ancient world were culturally interconnected, Schedl held that the ideas about the architecture of the cosmos were not only known among the Greeks but also in Babylonia. As a matter of fact, knowledge about astronomy and architecture, in which number and measure played a crucial role, had reached an advanced level in the New Babylonian Empire. It was precisely in this period, during and after the Babylonian exile, that most of the biblical writings were in the final stages of their formation. After the fall of Judah and the loss of the Temple, the scribes constructed a temple of words for their God Yahweh. Holy Scripture substituted the temple as the spiritual sanctuary, a situation that continued despite the actual rebuilding of the temple in Jerusalem.

In Schedl's opinion the scribes, who gave the religious texts their literary form, took over from the Babylonian culture a number of "building plans" governed by certain numbers functioning as formation principles, which they used to give structure to their writings. They purged the symbolism of such numbers from their pagan elements, stripped them of their polytheistic contents, and adapted them by furnishing them with new meanings. In addition to such borrowed patterns, the scribes devised literary designs of their own, such as the menorah-model and numerical patterns to seal their texts with the divine name. It was during this period that specific numerical compositional techniques were designed to give shape to sacred texts. These principles remained in vogue right through to the time of the formation of the books of the New Testament.

One can question Schedl's emphasis upon the supposed Babylonian influence, which I personally do. However, this does not detract anything from his thesis about the emergence of numerical compositional techniques during this period, and his discovery that the biblical writings are numerical compositions. Biblical scholars should take his thesis seriously. Objections could be raised against the fact that Schedl used a great number of symbolic numbers which gives the impression that most, if not all numbers have a symbolic function. Moreover, as H. Nobel has remarked in his critical evaluation of Schedl's work, he failed to provide his logotechnical analysis with a solid methodological basis so as to make it scientifically controllable. Nobel rightly notes, however, that this deficiency is typical of the work of a lone pioneer doing research in a totally uncharted field of study. It is up to coming generations of scholars to provide such a basis, a task that has been initiated by my research and carried a great step forward by Nobel.<sup>14</sup>

I am fully aware that there are still many questions to be answered regarding the origin and scope of numerical compositions in biblical times, and regarding the employment of numerical principles as a compositional technique to give structure to the texts. One cannot expect the results of the investigations carried out up till now to give adequate answers to the numerous historical questions raised by the discovery of the numerical aspects of the texts. These investigations were primarily concerned with the formal aspects of the texts—with numerical patterns and structural devices. Historical questions have not yet been addressed in any systematic way.

The present state of research can be compared with an archaeological excavation in which the foundations of an ancient city and a great number of artifacts have been laid bare. Nobody expects the archaeologist to give ready answers to the questions regarding the historical background of the discovery: who built the city, who dwelt there, and at what time, by whom and when was the city destroyed, causing it to fall into oblivion? The inability of the archaeologist to come

forward with the answers to such questions does not render his discoveries void of any significance, neither does it give anybody the right to shrug off the results of the excavation.

In light of this, I consider the conclusion drawn by some reviewers of my work: “Labuschagne has not proved anything yet,” unjustified. The massive amount of evidence I have brought to light sufficiently demonstrates the existence of notable numerical features of the biblical writings. The fact that I ventured to give my own interpretation of the evidence does not detract anything from the stark reality of the facts. My interpretations may be challenged, disputed, falsified, and rejected, but the hard facts I have brought to light up till now simply cannot be ignored indefinitely.

### **Schedl’s Numerical Analysis Of New Testament Texts**

The most important result of Schedl’s work on the New Testament is that he demonstrated beyond any doubt that the compositional techniques he detected in the Old Testament were also employed in this corpus of Jewish-Christian literature. This discovery underscores not only the unity of the two Testaments from this angle but also confirms the Jewish character of the New Testament. Since both are products of the Jewish culture, Schedl included the New Testament texts in his logotechnical analysis as a matter of course. The results of the numerical analysis of texts I myself have chosen at random, point in the same direction. In addition to the examples I cited above, I might mention some results of my analysis of the 26 verses of John 17.

It has a clear menorah-pattern with verse 14 at the center: 1–5; 6–8; 9–13; 14; 15–19; 20–24; 25–26. Moreover, verses 1–3, which deal with the glorification of the Son and the Father, consist of 58 words, with 26 in the main clauses and 32 in the subordinate clauses. The compositional formula  $26 + 32 = 58$  represent the numerical value of *kebod YHWH* “the glory



of the Lord.” The literary unit verses 1–5 is made up of exactly 91 words, which is  $7 \times 13$  (the numerical value of *’echad*, “one.” Verses 7–8 have 34 ( $2 \times 17$ ) words, and both verses 12–13 and 14–16 have 51 ( $3 \times 17$ ) words each, while verses 25–26 are made up of 39 words—the numerical value of both *YHWH ’echad*, “The Lord is One,” and *hashem*, “the name” (note the occurrence of *to onoma*, “the name,” in verse 26!).

In earlier numerical analysis of New Testament texts by J. Smit Sibinga, former professor at the University of Amsterdam, and by his pupil M. J. J. Menken, the numerical aspects of the New Testament have been studied from a one-sided point of view. These studies have focused solely upon the Greek-Roman world, while the Jewish background has been completely disregarded. Future numerical investigations into New Testament texts could profit greatly from Schedl’s work by following his broader approach in further research, which should focus particularly on the Jewish world.<sup>15</sup>

## Significant Compositional Models Discovered by Schedl

### a) The “Minor Tetraktys”

One of the most interesting compositional models discovered by Schedl is what he called the “*minor tetraktys*.” A text constructed according to this model consists of 55 words with one component of 23 words and the other of 32. The term “*tetraktys*” is explained by Schedl as deriving from the Pythagorean geometric figure formed by the first four numbers: 1, as a point, with 2 forms a line, with 3 a triangle and with 4 a three-sided pyramid. The sum of these four numbers is 10, the decade, the triangular number of 4 ( $1+2+3+4 = 10$ ). The number 55 is the triangular number of 10, or the sum of the numbers 1 through 10. In the Babylonian and Pythagorean mathematical system, these numbers were arranged in such a way that they constitute a one-dimensional equilateral triangle, or a three-dimensional pyramid. The equilateral



First, Psalm 23, the poem I described as a “compositional gem,” to which I have already referred with regard to the significance of the center of a text (see chapter 1 under the heading The Significance of Such Counting Activities.<sup>19</sup> As I explained there, a crucial theme in this psalm is the presence of God, which is symbolized in the text by the divine name number 26. The use of the “minor tetraktys” representing his “glory,” underscores God’s presence, which shows once again that there is a close relationship between content and form.

The 55 words of Psalm 23, without the heading, are divided in two different ways into 23 and 32. The number of words in the first half of each of the six verses, before the verse-divider (*ʿatnach*), total 32, while the words after the *ʿatnach* amount to 23, constituting the compositional formula  $55 = 32a + 23b$ . Moreover, if we look at the layout of the poem in the printed edition of *Biblia Hebraica Stuttgartensia*, which is based upon the *parallellismus membrorum*, we count 32 words in the first half and 23 in the second:  $55 = 32A + 23B$ . This means that our compositional formula has been used twice, as shown in the following table.

	<b>a + b = Total</b>		<b>A + B = Total</b>
1b	4 + 0 = 4	1b-2a	4 + 3 = 7
2	3 + 4 = 7	2b-3a	4 + 2 = 6
3	2 + 5 = 7	3b	3 + 2 = 5
4	<u>11 + 4 = 15</u>	4a	<u>5 + 3 = 8</u>
1b-4	20 + 13 = 33	1b-4a	16 + 10 = 26
		4a.b	3 + 4 = 7
5	5 + 5 = 10	5a	3 + 2 = 5
		5b	3 + 2 = 5
6	<u>7 + 5 = 12</u>	6a	4 + 3 = 7
		6b	<u>3 + 2 = 5</u>
5-6	<u>12 + 10 = 22</u>	4a-6	<u>16 + 13 = 29</u>
1b-6	32 + 23 = 55	1b-6	32 + 23 = 55

In the book of Deuteronomy, I have detected more than twenty instances of the “minor tetraktys.” The first occurs in 1:9–14, with 32 words in verses 9–11, and 23 in 12–14, with an extension in verse 15 of 21 words. Such extensions are rare in my opinion. The last two occurrences of the “minor tetraktys” figure in Deuteronomy are in 31:16–21 and in 32:5–9, 7–11 and 10–14.<sup>20</sup> Not all of them seem to have a clearly detectable connection with the presence of God, but their use in the context suggests such a symbolic significance.

Let us examine the instances in Deuteronomy 31 and 32 in detail. The passage in chapter 31 dealing with the appearance of the Lord “as a pillar of cloud” (representing his “glory”) in the Tent of Meeting to give Joshua his commission and to instruct Moses to compose the song, has some striking numerical characteristics.

Verses 14–15 are made up of 32 words, while verses 16–17 consist of 55 words, with 23 before, and 32 after the ‘atnach. The three instances of the numbers representing the numerical value of *kabod*, refer appropriately to the glory and presence of the Lord in the Tent of Meeting. The final verses, 26–28, where it is told that Moses summoned the elders and officers to hear the words of the song, have a total of 55 words. However, the components 23 and 32 have not been made visible in the text, though the compositional formula  $55 = 33$  (words in main clauses) + 22 (words in secondary clauses) is quite near the mark.

The two *kabod*-numbers, 23 and 32, figure again very prominently in chapter 32, where Moses recites the song in the hearing of the Israelites. This does not surprise us, since Moses composed the song in the Tent of Meeting, where he experienced the glory of God’s presence, as I have argued in my commentary on 31:22–23. The no less than seven occurrences of the two *kabod* numbers in 32:1–14 seem to have the function of radiating the glory of the Lord attached to Moses and the song.

There are 23 words in the narrative in verses 1–3; likewise 23 words in verses 5–6; 32 words in 7–9; 23 words in 10–11; 32 words in 13–14; moreover, there are 23 words before the *ʾatnach* in verses 7–10 and 32 before the *ʾatnach* in 7–12. The two numbers appear in pairs in verses 5–9, 7–11 and 10–14 to form three instances of the “minor tetraktys,” which seem to overlap each other.

verses 5–6	23 words	}	55
verses 7–9	32 words		
verses 7–9	32 words	}	55
verses 10–11	23 words		
verses 10–11	23 words	}	55
verses 13–14	32 words		

Apart from the profuse use of the *kabod* numbers 23 and 32, the two divine name numbers, 17 and 26, have been interwoven consistently into the entire text of the Song of Moses.

Chapters 33 and 34 are no exceptions to the rule; for the Blessing of Moses in 33:2–25 is made up of 272 (16×17) words with 153 (9×17) before, and 119 (7×17) after the verse divider, and the hymn in 33:26–29 has 52 (2×26) words. In 34:5–6 we count 26 words, and also in verses 7–8; in verses 9–10 there are 34 words, while verses 11–12 have 26. Surveying this in further detail would take us too far afield; therefore the reader is referred to my commentary, where a glance in the appendix will show the great number of occurrences.

Let us examine in conclusion the compositional gem in Deut 8:7–10, a Song of Praise for the Good Land, in which the “minor tetraktys” figures as a compositional formula. For the benefit of readers not versed in Hebrew, I present the text in translation. I shall refrain from presenting everything in detail and confine myself to showing how this beautiful architecture of words is carefully structured by 7, the number of fullness and abundance:

7. Since YHWH your God is bringing you into a good **LAND**<sup>1</sup>,  
—a **LAND**<sup>2</sup> with *streams* (1), *springs*(2), and *underground waters*(3), gushing out in valleys and hills,
8. a **LAND**<sup>3</sup> with wheat(1) and barley(2), vines(3), fig trees(4), and pomegranates(5),  
a **LAND**<sup>4</sup> with oil-rich olive trees(6) and honey(7);
9. a **LAND**<sup>5</sup> in which you will *eat food without scarcity*(4), in which you will *lack nothing*(5); it is  
a **LAND**<sup>6</sup> whose *stones are iron*(6), from whose hills you shall *mine copper*(7)—
10. you must eat and be sated and bless YHWH your God for the good **LAND**<sup>7</sup> he has given you.

Let us survey the evidence presented above.

- ▶ good LAND in verses 7 and 10 function as an *inclusion*
- ▶ the word LAND occurs 7 times in a key-word chain
- ▶ the land brings forth 7 products (verse 8)
- ▶ the land has 7 characteristics (vv. 7, 9 in italics)
- ▶ most significantly “*eat food without scarcity*” occupies center position, stressing the importance of food<sup>21</sup>
- ▶ the text consists of 14 (2×7) parts of sentences (main clauses and secondary clauses)
- ▶ the opening and closing sentences containing the term good LAND are made up of 7 and 7 + 3, totaling 17 words

A closer logotechnical analysis shows that the main compositional formula of the passage is  $55 = 26 + 29$ , which has obviously been chosen to weave the divine name into the fabric of the text. It occurs in two different ways: in the division of the text by means of the verse divider:  $55 = 26a + 29b$ , and in its division on the basis of the criterion “main clause” (Mc) and “subordinate clause” (Sc):  $55 = 29Mc + 26Sc$ .

In addition to this, 23 words are devoted to describing the activities of the *land*, while 32 words are used to describe what God does and what the Israelites do:

$$\begin{array}{r}
 \text{Total} = \mathbf{a + b} = \mathbf{Mc + Sc} = \mathbf{Land + Israel + YHWH} \\
 7. \quad 15 = 7 + 8 = 8 + 7 = 8 + 7 \\
 8. \quad 10 = 6 + 4 = 10 + 0 = 10 \\
 9. \quad 18 = 11 + 7 = 2 + 16 = 5 + 13 \\
 10. \quad 12 = 2 + 10 = 9 + 3 = \quad 9 + 3 \\
 \hline
 55 = 26 + 29 = 29 + 26 = 23 + 29 + 3 = 32
 \end{array}$$

### b) The “Major Tetraktys”

In the formula  $54 = 18 + 36$  Schedl detected a compositional model, which he derives from the Orphic geometrical figure of the cosmic tree. The stem of the tree, the number 1, branches off into the numbers 2 and 3, which branch off, in their turn, in an arithmetical progression into their squares, 4 and 9, and cubes, 8 and 27:

$$\begin{array}{ccc}
 8 = 2 \times 2 \times 2 & & 3 \times 3 \times 3 = 27 \\
 4 = 2 \times 2 & & 3 \times 3 = 9 \\
 2 & & 3 \\
 1
 \end{array}$$

The sum of the numbers  $1, 2, 3, 4, 8, 9, 27 = 54$ , is divided into two components: 36, the sum of the numbers at the base and the top ( $1 + 8 + 27$ ), and 18, the sum of the remaining numbers ( $2 + 4 + 3 + 9$ ). This interesting model seems to occur more frequently than Schedl supposed. In addition to the example he gives in Deut 5:23–27 (*Baupläne*, p. 40 and pp. 188–190), I detected six further instances in Deuteronomy 1–11, and 4 others in chapters 12–26.<sup>22</sup>

### c) The Pentateuch- and Decalogue-Model

Schedl derives the pattern  $4 + 1 = 5$  from the structure of the five books of the Pentateuch in which the book of Deuteronomy occupies a special position. The five chapters of the book of Lamentations, which we studied in chapter 1 above, seem to have been made up in this pattern, with four perfect alphabetic acrostics and one non-alphabetic imperfect acrostic. The

final form of the book of Psalms with its five books seems to reflect this pattern, since the four books of the original Psalter, which consisted of 119 ( $7 \times 17$ ) psalms (1–41; 73–89; 90–106; 107–150), were at a later stage augmented by the insertion of Psalms 42–72, as Christensen has shown—see the last paragraph of chapter 5 above. Moreover, the New Testament Pentateuch is modeled upon this pattern: the four Gospels and the book of Acts.

The term *Decalogue-model* is derived by Schedl from the structure of the Ten Commandments, divided into 4 plus 6; but he regards the division of the geometric decade of the “minor tetraktys” as the origin of the pattern. The division of 10 into the 4 numbers at the corners of the pyramid and the remaining 6 numbers forming a hexagon—see my commentary, volume IA, 30, where I give some examples but also express some reservations.

#### **d) The YHWH-*aechad* Model**

Schedl has registered several instances of the occurrence of the compositional formula  $39 = 26 + 13$ , which he labelled the YHWH-*ʿechad* model. Remarkably enough, it does not occur in the cardinal passage in Deut 6:4–9 containing the profession of YHWH’s oneness. However, I discovered that it does occur, for instance, in 4:5–8, a passage dealing with the unity of Israel and her Torah, as well as in 4:32–35, where the theme is the oneness of YHWH’s acts in history and the uniqueness of Israel’s experience at Mount Horeb. It occurs several times in the story about Moses’ destruction of the golden calf in 9:7 – 10:11, for instance in 9:15–17 (see my commentary, volume IB, 183–185). It also figures in 16:10–11, 22:6–7, 26:1–2, 28:68–69, 29:19–20. The last instance I found is in 33:1–3, where the compositional formula has been used twice. Particularly interesting is the frequent occurrence of 13, the numerical value of *ʿechad*, “one,” in Deut 12:1–31, the passage about the one place of worship and the unity of the cult based upon the oneness of YHWH. The total number of words amount to 520 ( $40 \times 13$ ), with 260 ( $20 \times 13$ ) in



the main clauses and 260 in the subordinate clauses. In the plural passages I counted 195 ( $15 \times 13$ ) words, and in the singular sections 325 ( $25 \times 13$ ).

In many instances where 39 words occur in a text, they are alternatively structured according to the formula  $39 = 17 + 22$ , obviously to make the divine name number 17 explicit. I detected this formula, for instance, at the beginning of the book, in 3:1–2; 3:3–4; 3:8–10 and at the end in 30:1–2 and 29–30, which the reader can check in the appendices to my commentary.

The YHWH-*'echad* compositional formula,  $39 = 26 + 13$ , appears to give structure also to the collection of the canonical books of the Old Testament. There are of course different ways of looking at the structure of the collection, depending upon the way one groups and counts them.<sup>23</sup>

One can count 22, by taking as one book Judges and Ruth, 1 and 2 Samuel, 1 and 2 Kings, as well as Jeremiah and Lamentations, the Twelve Minor Prophets, Ezra and Nehemiah and 1 and 2 Chronicles, which is the view of Origen and Jerome.

- ▶ 22 books can be counted in another way, by taking the five “Festal Scrolls” as a single unit—like the Book of the Twelve (minor prophets) and counting the five books of Moses, thirteen “prophets,” and four “hagiographa” with Josephus.<sup>24</sup>
- ▶ 24 books can be counted if Ruth and Lamentations are regarded as separate books—a view found in the Talmud, 4 Ezra, and Melito.
- ▶ 27 books can be counted by splitting Samuel, Kings and Chronicles into two books each—the view expressed in the List of Bryennios, in Epiphanius, in the Septuagint, and the Vulgate.
- ▶ 39 books can be counted by regarding as two books not only 1 and 2 Samuel, 1 and 2 Kings and 1 and 2 Chronicles, but also Ezra and Nehemiah, and by counting the twelve books of the Minor Prophets separately. This is the most differentiated view of the collection and is found in most modern translations.

The 39 books, according to their arrangement in the Hebrew Bible, which differs from that of the Septuagint, Vulgate, and modern translations, show the following structure:

Genesis, Exodus, Leviticus, Numbers, Deuteronomy	5	}	11	}	26	}	39
Joshua, Judges, 1 and 2 Samuel, 1 and 2 Kings	6	}	11	}	26	}	39
Isaiah, Jeremiah, Ezekiel, Twelve Minor Prophets	15	}	15	}	26	}	39
Psalms, Job, Proverbs, the Five Scrolls, Daniel, Ezra, Nehemiah, 1 and 2 Chronicles						}	39

The 11 “historical books” and the 15 “prophetical books” represent numerically the classic division of the name in  $YH=15 + HW=11 = YHWH=26$ . Therefore, even the collection of canonical books appears to proclaim the quintessence of Israel’s faith: *YHWH ’echad*, “The Lord is one.”

#### e) The Numerical Menorah-Structure and the Balance-Model

In the preceding chapters, we have already seen several examples of the menorah-pattern. Their main characteristic is that they are made up of seven elements: parts of sentences, sentences, verses, smaller or larger literary units. Let us now examine instances of the numerically governed menorah-pattern. The basic principle essential to this stricter specimen is the striving for symmetry and balance. As a matter of fact, symmetry and balance are the most important features of Old Testament compositional art, more particularly of Hebrew poetry. This property is manifested primarily in the *maschal*, the proverbial saying constructed in parallelism (*parallelismus membrorum*), but also in the division of verses into two halves by the *’atnach*, or verse divider.

The perfect numerical menorah is symmetrical in form with a center that functions as the focal point, as we have seen in the examples adduced above. Let me illustrate this model by means of the very first menorah-pattern discovered by Claus Schedl: Deut 5:14, the prohibition of labor on the seventh day. It is made up of 26 words structured as follows:<sup>25</sup>

The seventh day is a sabbath to the Lord your God;	5w.	} 26
in it you shall not do any work,	4w.	
you, or your son, or your daughter,	3w.	
<b>or your slave, or your slave-girl</b>	<b>2w.</b>	
or your ox, or your ass, or any of your cattle	4w.	
or the alien residing among you,	3w.	
so that your slave and slave-girl may rest as you do	5w.	

The text is structured throughout by the number 7. There are no less than six pairs having 7 words together: the first branch of the menorah, like its counterpart the seventh, together with the mathematical center have  $5+2=7$  words; the second branch and its counterpart the sixth, like the second and third, and the fifth and the sixth have  $4+3=7$  words; the third branch and its counterpart the fifth have  $3+4=7$  words. The two words at the center are flanked by 12 words before and after. For this type of menorah, having a strict mathematical center, I have coined the term “balance-model,” of which I shall give further examples from the Old Testament presently.<sup>26</sup>

The mentioning of the slave and slave girl at the center of the menorah is of special importance for the interpretation of the text. As the focal point this category, they receive specific emphasis, which should not surprise us, since the slave and slave girl were the most vulnerable members of the household and subject to being called upon first to carry out chores or run errands on the Sabbath. No wonder that they are explicitly referred to once again in the last sentence.

The very first numerical menorah I myself discovered is the passage in Deut 1:34–40 with its theme, the granting of permission to enter the promised land—more particularly God’s refusal to grant Moses that privilege. The 7 verses are structured in a similar pattern by the numbers 34 ( $2 \times 17$ ) and 26:

Verse 34 <b>YHWH’s reaction to the Israelites’ words</b>	8	} 34
Verse 35 Entrance refused to the <i>old generation</i>	15	
Verse 36 Entrance granted to <i>Caleb</i>	19	} 34
Verse 37 <b>Entrance refused to Moses</b>	11	
Verse 38 Entrance granted to <i>Joshua</i>	15	} 34
Verse 39 Entrance granted to the <i>new generation</i>	19	
Verse 40 <b>YHWH’s command to the Israelites</b>	8	

The first and last verses, which are identical in length, function as an inclusion. The second branch of the menorah and its counterpart the sixth, dealing with the old and the new generation, have together  $15+19 = 34$  words; so do the second and the third, about the old generation and Caleb, as well as the fifth and the sixth, dealing with Joshua and the young generation; the third branch and its counterpart the fifth, dealing with the two persons granted permission to enter, have  $19+15 = 34$  words; the 11 words at the center are preceded and followed by 42 ( $6 \times 7$ ) words. Moreover, the second branch and the center, dealing with the old generation and Moses, are made up of  $15+11 = 26$  words; so are the fifth branch and the center, dealing with Joshua and Moses:  $15+11 = 26$  words (the classic division of 26). In verse 37, the crucial theme of the Lord's refusal to grant Moses permission to enter the promised land occupies center position.

This theme reverberates strikingly in two further passages in Deuteronomy: in 3:23–29 and 4:20–24, both of which are structured in a similar balance-pattern.

In the 7 verses of 3:23–29, verse 26, in which Moses relates in 19 words the Lord's refusal to grant him entrance to the land, stands at the mathematical center, preceded and followed by 40 words. The 99 words are divided in 52 words before, and 47 after the *'atnach*. Moses' prayer consists of exactly 34 ( $2 \times 17$ ) words, and God's answer has 44 words, which makes a total of 78 ( $3 \times 26$ ) words in the two speeches. The Lord's command to Moses in verse 26b to refrain from raising the matter again, is made up of 9 words, while its continuation, the command to climb the mountain (verse 27) has 17 words, together 26 words.<sup>27</sup>

The shorter text, 4:20–24 has the same pattern: the crucial 9 words in verse 22a, "I myself am to die in this country; I shall not cross the Jordan," stand in the absolute center, preceded and followed by 35 ( $5 \times 7$ ) words.<sup>28</sup>

These three texts clearly demonstrate the close relationship between contents and form. Their common theme seems to require a matching structure.

Let us now examine more closely a major passage, which we have studied above on the level of verses, Deuteronomy 4–11 (see chapter 5 under “Counting Verses in Deuteronomy”). There we mentioned its near perfect balance-pattern, being made up of 204 ( $12 \times 17$ ) words divided into 7 “larger” and 59 “smaller” literary units and a block of 101 words and another of 103 words. It is structured by the 7+4 pattern and the number 26.

I	4:1–43	Warning against idolatry	7 + 4	} 26
II	5:1 – 6:3	The crucial Horeb experience	7 + 4	
III	6:4–25	The essence of Israel’s faith	4	} 26
IV	7:1–26	<b>Attitude towards other nations</b>	7	
V	8:1 – 9:6	The land as God’s gift	7	} 26
VI	9:7 – 10:11	The desert drama in retrospect	8	
VII	10:12– 11:32	Preconditions for living in peace	7 + 4	

The crucial chapter 7 at the center, with its 26 verses divided over 7 “smaller units,” is flanked in its larger context by 26 “smaller units.” This menorah within a menorah has the following structure, based upon the contents and its numerical features.

1–4	<b>“Exterminate the nations!”</b>	66	
5–6	You shall <b>destroy</b> the cult: <i>you are YHWH’s people!</i>	34	
7–11	<i>Encouragement:</i> God redeemed you from <b>Egypt!</b>	76	⋯⋯⋯
12–16	<b>Promise of God’s blessings.</b>	90	⋯⋯⋯:136
17–20	<i>Encouragement:</i> remember YHWH deeds in <b>Egypt!</b>	60	⋯⋯⋯ (8×17)
21–24	You shall <b>destroy</b> them: <i>YHWH is in your midst!</i>	52	
25–26	<b>“Exterminate the nations!”</b>	34	

The first and last branches of the menorah, with their 100 words, have the same theme and function as an inclusion of the perfect symmetrically structured composition made up of 312 ( $12 \times 26$ ) words. The second branch of the menorah has 34 ( $2 \times 17$ ) words; its counterpart has 52 ( $2 \times 26$ ) words. The last branch is made up of 34 ( $2 \times 17$ ) words. The two *encouragements* in the third and fifth branches are made up of  $76 + 60 = 136$  ( $8 \times 17$ ) words. The promise of God’s blessings is situated at the center, in pride of place.

Let me conclude the survey of the balance-pattern by mentioning some instances outside the book of Deuteronomy, to show that it is not a specific Deuteronomic compositional technique. I need not remind the reader of Psalm 23, with its mathematical center “you are with me” flanked by 26 words, which we studied in chapter 1 and referred to again above. Another significant instance in the book of Psalms is the text of Psalm 92, a “Song for the Sabbath day” (without the heading). Its 15 verses has the following structure:

verse 2	6	}		}	
verse 3	5				
verse 4	7	}	25	}	
verse 5	7				
verse 6	7	}		}	52 (2×26)
verse 7	9				
verse 8	11	}	27	}	
<b>verse 9</b>	<b>4</b>				
verse 10	12	}		}	
verse 11	6				
verse 12	8	}	26	}	52 (2×26)
verse 13	6				
verse 14	6	}		}	
verse 15	6				
verse 16	8	}	26	}	

The conspicuously short verse 9, with its 4 words, is situated at the mathematical center: “you, Lord, reign for ever!” This focal point is underscored by the 7 instances of the name YHWH (in verses 2, 5, 6, 9, 10, 14, and 16) with the fourth occurrence in verse 9 at the center.

The structure of Psalm 90 is quite similar. The text of the poem itself (without the four word heading) is made up of 17 verses comprising 136 (8×17) words with 85 (5×17) before, and 51 (3×17) after the *ʾatnach*. The poem is divided into two equal halves: verses 1b-9 with 68 (4×17) words (42 before, and 26 after the *ʾatnach*), and verses 10–17 with 68 words (43 before and 25 after the *ʾatnach*). The mathematical center of the poem is situated between verse 9 and verse 10. However, if we include the four word heading, the mathematical center is

constituted by the four words at the end of verse 9, in 9b, which convey the quintessence of the psalm: “our years die away like a murmur.”

Psalm 91 is similarly divided into two numerically equal parts: verses 1–8 with 56 words, in which the poet speaks about God in the third person, and verses 9–16 with 56 words, where the author suddenly addresses God in the second person (verse 9, which reminds us of Ps 23:4). Another instance of a psalm consisting of two numerically equal halves is Psalm 79, which has 65 words in the first section (verses 1–7) and 65 in the second section. Such balance-structures do not necessarily have a clear central core.<sup>29</sup>

A further example is found in the seven visions of the prophet in Zechariah 1–8, with the fourth vision about the menorah and its lamps at the center, which we referred to in chapter 3, under the heading “The Significance of the Menorah in Center Position.” The 14 verse passage containing the fourth vision, 4:1–14, is a menorah within a menorah. The total number of words amounts to 187 ( $11 \times 17$ ). Verse 7, with its 15 words, is situated in the mathematical center of the menorah, flanked by 86 words:  $86 + 15 + 86 = 187$ . Incidentally 86, which is  $2 \times 43$  ( $17 + 26$ ), represents the numerical value of *’elohim*, “God,” but more importantly 43 is the numerical value of the name of the central figure, Zerubbabel זרובבל: (ז=7) + (ר=20) + (ב=2) + (ב=2) + (ל=12) = 43.<sup>30</sup>

This brings us to our discussion of a favorite biblical compositional technique: the use of the numerical value of a name or keyword determining the number of words in the text.

### Keywords Determining the Number Of Words in a Text

The reader has already been introduced to this principle of composition, when we came across the number 14 as the numerical value of the name David (14 generations) and 41 representing that of the name Abraham in Matthew 1 (41

progenitors in the genealogy, and 41 words in verses 7–9). The purpose of this technique is to underscore numerically the central idea in a text, which is in the case of Matthew 1, as we have seen, to show that Jesus is the son of Abraham and of David—see chapter 2 under “Examples from the Gospels.”

This is one of numerous instances of the occurrence of this principle, which as a compositional technique is still a wholly uncharted territory. In my study of Deuteronomy, my interest in this technique was roused by the frequent occurrence of the number 38 in the passage in which it is said that “the journey from Kadesh-barnea to the crossing of the Zared lasted thirty-eight years” (2:8b-15, verse 14). The text consists of 114 words, which is  $3 \times 38$ . There are exactly 38 words in the “ethnographic note” in verses 10–12, and 38 words in the “we-account” (8 words in verse 8b and 9a, plus 4 words in 13b, plus 26 words in verse 14), and 38 words in the rest of the text (28 in the divine speech into which the “ethnographic note” was inserted, and 10 words in Moses’ comment in verse 15).<sup>31</sup>

The use of the number 38 reminds us of the New Testament story about the man who had been crippled for thirty-eight years (John 5:1–18). Menken has observed that the narrative consists of 190 ( $5 \times 38$ ) words, and that up to 5:15 the discourse amounts to 76 ( $2 \times 38$ ) words, with 19 words in the rest of the discourse.<sup>32</sup>

Let me mention some further examples of the occurrence of this technique in Deuteronomy:

- 1) The numerical value of the name מֹשֶׁה “Moses,” 39 (מ=13) + (ש=21) + (ה=5) = 39, which is similar to *hashem*, “the name”!) seems to have been used in both Deut 1:1–5 and 4:44–49, two introductory “headings” which are very similar. The text of the first, preceding the introductory formula *le’mor* at the end, consists of 78 ( $2 \times 39$ ) words, composed according to the formula  $78 = 39 + 39 + 1$ , with 39 words before, and 39 after the verse divider (see my commentary, volume IA, 65–68). The second heading in 4:44–49 has likewise 78 words, and is structured according to the compositional formula  $78 = 26a + 52b$ , which is repeated in the syntax:  $78 = 26Mc + 52Sc$  (see volume IB, 11–13).



Moreover, we count 40 words in verses 44–46 and 38 in 47–49. This might be a coincidence, were it not that the formula  $78 = 38 + 40$  can be detected in 1:1–5, which means that the two crucial numbers pertaining to the journey in the desert figure prominently in both texts.

- 2) In 15:4–6, where God’s blessing is promised, we count 54 words, the numerical value of the word *yebarekkeka*, “He will bless you” (verse 4).
- 3) In 16:1–4, the passage dealing with the celebration of the Passover, there are 73 words, the numerical value of *lechem ‘oni*, “bread of affliction” (verse 3).
- 4) In 17:16–20, where the king is ordered to make himself a copy of the Mosaic law, we find 93 words, the numerical value of *hattorah hazzot*, “this law” (verse 19), with 35 in verses 16–17 (the value of *hazzot*, “this”) and 58 in 18–20 (the value of *hattorah*, “law”).
- 5) In 19:8–10, the command not to shed innocent blood in the land, there are 60 words, the numerical value of *dam naqi*, “innocent blood” (verse 10), with exactly 17 words in the main clauses (the value of *dam*, “blood”) and 43 in the subordinate clauses (the value of *naqi*, “innocent”). Moreover, the whole section 19:1–10, dealing with the sanctuary cities, consists of 186 words, the numerical value of the command in verse 7: *šaloš ‘arim tabdil lak*, “set apart three cities for you.”
- 6) In 21:1–9, another passage dealing with the shedding of innocent blood, there are 135 words, the numerical value of *haddam hannaqi miqqereb*, “innocent blood from your midst” (verse 9).
- 7) In 19:14–21, in which the giving of false evidence is dealt with, we count 107 words, the numerical value of the keywords *ubi’arta hara’*, “you shall rid yourself of this wickedness” (verse 19), which is made up of 66 words in the main clauses (the value of *ubi’arta*) and 41 in the subordinate clauses (the value of *hara’*).
- 8) In 24:10–18, a passage about basic human rights (which has 119 ( $7 \times 17$ ) words), the first section, 10–13, consists of 46 words, the numerical value of the keyword *tsedaqah*, “righteousness” (verse 13).
- 9) Three related texts that have intrigued me in this respect are Exod 14:15–19, 23:20–23 and 33:1–3 where the “angel” or

“messenger” of the Lord is referred to. The divine speeches in both 14:15–19 and 33:1–3 have exactly 47 words, the numerical value of *mal’aki*, “my angel/messenger.” This enigmatic figure is mentioned in 14:19; 33:2—where the Septuagint has “my messenger” as in 33:34 and 23:23. In 23:21, where it is said that “my name is in him,” the verse is made up of 47 letters. To crown it all, the first part of the divine speech in Mal 3:19–21 (in most translations 4:1–3), introducing the promise of the coming of Elijah, consists of 47 words; the promise itself in 3:23–24 (4:5–6) has 28 words, the numerical value of Elijah ( $\aleph=1 + \beth=12 + \daleth=10 + \varepsilon=5 = 28$ ).

- 10) My final example comes from the book of Ecclesiastes (Qohelet), to which my attention was drawn by Duane Christensen. The book is made up of 2997 words ( $81 \times 37$ ) and 222 verses ( $6 \times 37$ ). The number 37, which appears to govern the text, represents the numerical value of the keyword *hebel*, “vanity.” Significantly enough it occurs 37 times in the book. Moreover, the numerical value of the five occurrences of *hebel* in 1:2 equals 185, which is  $5 \times 37$ . This corresponds to the number of verses in what Christensen regards as the “inner frame”: 92 in 2:1 – 6:8 plus 93 in 6:10 – 11:6. The 36 verses ( $18+18$ ) in the “outer frame”: 1:1–18 and 11:7 – 12:14, together with the single verse in the center of the structure (6:9) add up to 37.

Outer frame:	1:1–18		18 verses
Inner frame:	2:1 – 6:8	92 verses	
<b>Center</b>	<b>6:9</b>		<b>1 verse</b>
Inner frame:	6:10 – 11:6	93 verses	
Outer frame:	11:7 – 12:14		18 verses
Total: $185 (5 \times 37) + 37 = 222 (6 \times 37)$			

Christensen’s reconstruction of the structure of the book is based upon his view of the “outer frame” and upon the supposition that 6:9 constitutes the mathematical center of the book. However, there is another way of ascertaining the structure of the text. A more plausible view of the “outer frame,” in my opinion, is that it is constituted by the preamble, 1:1–11 (so delimited in the *Leningrad Codex* by means of the only *parashah petucha*, “paragraph marker,” in the whole text), and the epilogue, 12:9–14. The core of the book begins with 1:12, “I, Qohelet, ruled as king

over Israel in Jerusalem,” and ends with 12:8, “Utter futility, says Qohelet, everything is futile.” As for the center of the book: the mathematical center of the entire text is situated between 6:9 and 6:10, with 111 verses before and 111 after this point. This means that not only 6:9, but also 6:10 could be regarded as the most central verse. Thus there seems to be uncertainty about the real center of the book.

The editor responsible for the book of Ecclesiastes in the *Biblia Hebraica Stuttgartensia* took the liberty of indicating the mathematical center of the text on the level of verses between 6:9 and 6:10. He did so by using the current reference found elsewhere in the codex, *chetsi hassefer*, “center of the book,” and by adding the word *bappesugim*, meaning “in the verses.” However, a glance at *Codex Leningrad* (and at Kittel’s *Biblia Hebraica*) tells us that the sign in the margin signifying the center of the book and the words *chetsi hassefer*, “center of the book,” are not situated at 6:9/10, but at 6:12! Moreover, there is no trace of the word *bappesugim*, “in the verses,” of which the editor gave the impression that it figures in the codex.<sup>33</sup>

The editor of the *Biblia Hebraica Stuttgartensia* clearly tried to “correct” the Masorah in *Codex Leningrad*, which is, to say the least, unjustified and misleading. The codex obviously represents a different view of what the “center of the book” is, or more correctly, what the Masoretes regarded as “the book” in this case: the core of the present book, 1:12 – 12:8. As Nobel has suggested, without the 17 verses of the preamble and the epilogue (the 11 verses of 1:1–11 and the 6 verses of 12:9–14), the book itself (1:12 – 12:8) is made up of 205 verses. The mathematical center of these verses constituting the core of the book, is the 103rd verse, 6:12, which appears to contain the quintessence of Qohelet’s view of life:

For who can know what is good for anyone in this life, this brief span of futile existence through which one passes like a shadow? What is to happen afterwards here under the sun, who can tell?

The *Leningrad Codex* reflects the following view of the structure of Ecclesiastes, by which the mathematical center was computed on the basis of the core of the book, 1:12 – 12:8:

<i>The Preamble</i>	<i>1:1-11</i>	11
First half of the book	1:12 – 6:11	102
<b>Mathematical center</b>	<b>6:12</b>	<b>1</b>
Second half of the book	7:1 – 12:8	102
<i>The Epilogue</i>	<i>12:9-14</i>	<u>6</u>
		205 + 17 = 222

The mathematically central verse of the “real” book, 6:12, is preceded by 102 ( $6 \times 17$ ) verses and followed by another 102 verses, which means that the divine name number 17 has been interwoven into the fabric of the text surrounding this central verse. Significantly, the preamble and the epilogue taken together are made up of exactly 17 verses, which appears to seal the whole book with the divine name. If there were any doubts about whether this book belongs in the canon, such doubts could have been removed by the fact that Qohelet was provided with such a watermark of canonicity.

With regard to the numerical structure of the book Qohelet, Duane Christensen has remarked: “Qohelet appears to be the most finely crafted numerical composition in the Bible.”<sup>34</sup> Very true, though I would say “*one* of the most finely crafted numerical compositions,” since there are other such compositional gems in the Bible, which render it a high-grade literary work of art, as we have seen above.