# Friedrich Gustav Lang Observations on the Disposition of Hebrews 

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Abstract: The disposition of Hebrews is analyzed in terms of literary structure and significant proportions. The discussion of differing proposals for the letter leads to an outline of five main parts. Two christological sections (1:1-2:18; 7:1-10:18) alternate with two hortatory ones calling to faith (3:1-6:20; 10:19-12:29), then follow general exhortations (13:1-21), finally an epistolary appendix (13:22-25). The stichos of 15 syllables is introduced as the ancient standard measure of Greek prose. Counting stichoi in Hebrews reveals remarkable proportions seemingly due to intentional disposing. The letter's first main part, for example, is half the size of the second one, and both together half the size of the whole. All results of the structural and stichometrical analysis are then condensed in a tabular outline.

Keywords: Introduction into Hebrews; Jesus as High Priest; heavenly sanctuary; concentric composition; stichometry; Fibonacci series.

The main topic of Hebrews is Christ's priesthood. His priestly function, the "purification for sins", is mentioned right at the beginning (1:3). His office as heavenly high priest is extensively described in the letter's center. The interpreters disagree in their proposals how to structure the letter around this center? ${ }^{1}$ A few scholars see no systematic outline, but treat the passages simply one after the other. ${ }^{2}$ Most scholars, however, present an

[^0]elaborate disposition. A majority of them sees the end of the central section in 10:18, before the exhortations follow. Yet there is no agreement about the beginning of this section. As a first step, we will discuss these questions of composition. Later we will try to corroborate our findings by looking at size and proportions of the main parts, but before that, as the second step, we will introduce the stichos, the standard line of Greek prose presumably used also by ancient authors. A comparison of the structure of Hebrews with aspects of ancient esthetics concludes these observations.

## 1. The Structure of Hebrews

Three solutions have been proposed concerning the beginning of the central section. In the first a main caesura is set after $4: 13 .{ }^{3}$ In this case, Christ's function as "great high priest" is first introduced (4:14-6:20), then described ( $7: 1-10: 18$ ). Sometimes the end of this section is postponed until $10: 25,10: 31$ or $10: 39 .{ }^{4}$ Sometimes the middle section begins three verses

Letters and Homilies for Jewish Christians: A Socio-rhetorical Commentary on Hebrews, James and Jude (Downers Grove, IL: IVP Academic, 2007) 7-8, 51. This exegetical approach is called "structural agnosticism" by: G.H. Guthrie, The Structure of Hebrews: A Text-Linguistic Analysis (NovTSup73; Leiden: Brill, 1994) 24-26.
3 See D.L. Allen, Hebrews (NAC 35; Nashville, TN: B\&H, 2010) 93-94; K. Backhaus, Der Hebräerbrief (RNT; Regensburg: Pustet, 2009) 10; G.L. Cockerill, The Epistle to the Hebrews (NICNT; Grand Rapids, MI: Cambridge, 2012) 79; H. Hegermann, Der Brief an die Hebräer (ThHK 16; Berlin: EVA, 1988) IX; O. Kuss, Der Brief an die Hebräer (2nd ed.; RNT 8/1; Regensburg: Pustet, 1966) 253; O. Michel, Der Brief an die Hebräer (KEK 13, 14th/8th ed.; Göttingen: Vandenhoeck, 1984) 6; G. Schunack, Der Hebräerbrief (ZBK.NT 14; Zürich: TVZ, 2002) 14; A. Strobel, Der Brief an die Hebräer (NTD 9/2, 13th/4th ed.; Göttingen: 1991) 202; H.-F. Weiß, Der Brief an die Hebräer (KEK 13, 15th/1st ed.;; Göttingen: Vandenhoeck, 1991) 8-9.
See also: W.G. Kümmel, Einleitung in das NT (17th ed.; Heidelberg: Quelle \& Meyer, 1973) 244-245; E. Lohse, Entstehung des NT (ThW 4; Stuttgart: Kohlhammer, 1972) 123; U. Schnelle, Einleitung in das NT (UTB 1830; Göttingen: Vandenhoeck, 1994) 424-425.
Similarly, but with additional major caesuras within 4:14-10:18: F.F. Bruce, The Epistle to the Hebrews (NICNT; rev. ed.; Grand Rapids, MI: Eerdmans, 1990) IX: at 8:1; P.T. O'Brien, The Letter to the Hebrews (PillarNTC; Grand Rapids, MI: Eerdmans, 2010) VIII-IX: at 5:1; 8:1.
4 See (1) until 10:25: G.H. Guthrie, Hebrews (NIVApplicationComm; Grand Rapids, MI: Zondervan, 1998) 39-40; (2) until 10:31: W. Nauck, "Zum Aufbau des Hebräerbriefes," in Judentum, Urchristentum, Kirche: Festschrift für J. Jeremias (ed. W. Eltester; BZNW 26; Berlin: Töpelmann, 2nd ed. 1964) 199-206, here 203;
later in 5:1. ${ }^{5}$ In these variants, the hortatory introduction is connected with the hortatory consequences, both framing the "Herzstück" (heart) dealing with Christ's sacrifice and blood in 7:1-10:18. ${ }^{6}$

A similar concentric outline is the idea of the second solution, proposed firstly by French scholars beginning with Vaganay's article of 1940. ${ }^{7}$ The central section in this analysis begins in 5:11, its supposed end varies between 10:18 and 10:39. ${ }^{8}$ Among American followers, it varies between 10:25 and 10:39. ${ }^{9}$ The section contains first the distinction between teaching for beginners and for advanced Christians (until 6:20), then the chapters on the high priest Christ, and finally the hortatory consequences (from 10:19 on). All these delimitations seem problematical because there is no obvious main caesura in the text, neither before $5: 11$, nor before $10: 26,32$ or $11: 1$. The same is true, by the way, before $4: 14$, and also before $4: 11$ or 5:1. The variety of proposals is a clear indication of a certain uncertainty.

Here, therefore, the third solution is favored. In this the central section is identical with the exposition on Christ as the high priest according to

Kümmel, Einleitung, 345; Hegermann, Hebräer, 5; Schnelle, Einleitung, 424; M. Karrer, Der Brief an die Hebräer (2 vols.; ÖTK 20/1-2; Gütersloh/Würzburg: Gütersloher/Echter, 2002/08) 1:8; P. Pokorný and U. Heckel, Einleitung in das Neue Testament (UTB 2798; Tübingen: Mohr, 2007) 674; (3) until 10:39: Michel, Hebräer, 6.
5 See G.W. Buchanan, To the Hebrews (AB; Garden City, NY; Doubleday, 1972) 1-2: 5:1-10:39; C.L. Westfall, A Discourse Analysis of the Letter to the Hebrews (LNTS 297; London: Clark, 2005) 240-241: 5:1-10:25; cf. 137: 4:11[!]-16 and 10:19-25 as summarizing verses belonging to the previous and the following sections.
6 Michel, Hebräer, 26.
7 See L. Vaganay, "Le plan de l'épître aux Hébreux," in Mémorial Lagrange (ed. École Biblique et Archéologique Française; Paris: Gabalda, 1940) 269-277, here 270-271.
8 See C. Spicq, L'épître aux Hébreux (EBib; 2 vols.; Paris: Gabalda, 1952/53) 2:441: until 10:18; A. Vanhoye, La structure littéraire de l'épître aux Hébreux (StudNeot 1; Paris: Desclée de Brouwer, 1963) 284; idem, Structure and Message of the Epistle to the Hebrews (SubBi 12; Roma: Pontificio Istituto Biblico, 1989) IX; L. Dussaut, Synopse structurelle de l'épître aux Hébreux (Paris: Cerf, 1981) 17-18: until 10:39 (Dussaut's central section begins in 5:11 as well, " $5: 13$ " is obviously a misprint).
9 See H.W. Attridge, The Epistle to the Hebrews (Hermeneia; Philadelphia: Fortress, 1989) 19: until 10:25; P. Ellingworth, The Epistle to the Hebrews (NIGTC; Grand Rapids, MI: Eerdmans, 1993) Iv: until 10:39; cf. J.P. Heil, Hebrews: Chiastic Structures and Audience Response (CBQMS 46; Washington, DC: Catholic Biblical Association, 2010) 15-16: until 9:28.

Melchizedek in 7:1-10:18. ${ }^{10}$ These chapters are exclusively didactic, without any exhortation. They can be regarded as a compositional unity of three major parts.

It is obvious that a new part of this section begins in 8:1 introducing "the main point" ( $\kappa \varepsilon \varphi \alpha ́ \lambda \alpha \omega o v)$. Before that, chapter 7 deals with Christ's qualification as a priest like Melchizedek, in contrast to the levitical priesthood "a high priest, holy, blameless, undefiled, separated from sinners, and exalted above the heavens" $(7: 26) .{ }^{11}$ The chapter seems to be structured in five paragraphs: firstly the narration of Abraham's encounter with Melchizedek of Gen 14 (7:1-3), then the comparison with the levitical priesthood in three respects, defining the Son's priesthood as superior, perfect, and permanent ( $7: 4-10,11-19,20-25$ ), and finally a summary (7:26-28).

After 8:1, the suggestion of a second caesura before $9: 15$ seems justified, though the structuring is not unanimous. Most interpreters take the passage till $10: 18$ as a unit without a major break, ${ }^{12}$ while others prefer a break elsewhere. ${ }^{13}$ In any of these cases, the "ministry" of the high priest (8:6: $\lambda \varepsilon \tau \tau o v p \gamma i \alpha)$ is the overarching topic of chapters $8-9$. In our delimitation, however, the second major part ( $8: 1-9: 14$ ) deals pointedly with Christ's heavenly sanctuary belonging to the new covenant, in contrast to the sanctuary of the first covenant described in 9:1-5, in the center. Before that, the two sanctuaries (8:1-6) and the two covenants ( $8: 7-13$ ) are distinguished, as are thereafter the old priests $(9: 6-10)$ and the new high priest (9:11-14). ${ }^{14}$ The "main point" of $8: 1$ specifically refers to this central

[^1]part about Christ's holy place in heaven to which the believers are invited to approach $(4: 16 ; 10: 19,22) .{ }^{15}$
Christ's work of reconciliation is the topic of the third major part (9:1510:18), with the contrast between the sacrifice of his own blood and of the blood of sacrificial animals, between actual forgiveness and purely the reminder of sins $(10: 3,18)$. The five subsections begin with the general importance of blood as the presupposition (9:15-22). Then Christ's sacrifice (9:23-28) is compared with the sacrifices of animals (10:1-4) and grounded in an exposition of Psalm 40:7-9 (10:5-10). The final summary connects the forgiveness of sins with the sanctification of life (10:11-18).

In all three major parts, i.e. concerning Christ's priesthood, sanctuary and sacrifice, it is pointed out that his sacrifice has been made "once for all" ( $\dot{\varepsilon} \varphi \alpha \pi \alpha \xi: 7: 27 ; 9: 12 ; 10: 10)$. Each of these three parts refers also to a longer and to a short quotation of the Old Testament which may also be a deliberate structuring feature: ${ }^{16}$ to Gen 14:18-20 and Ps 110:4 (Hebr 7:1-2; 7:17, 21), to Exod 25:40 and Jer 31:31-34 (Hebr 8:5; 8:8-12), and to Exod 24:8 and Ps 40:7-9 (Hebr 9:20; 10:5-9). The unity of all three parts can be seen at the end when Ps 110 and Jer 31 are quoted again (10:12-13; 10:1617).

Concerning the letter's beginning and end there are some minor variants among the commentators. Some separate the first three or four verses (1:14) as an exordium. ${ }^{17}$ Yet the christological basis in these verses is interpreted in the following paragraphs, so that the whole passage belongs together without a major caesura after the beginning. At the letter's end, the shift is more obvious, though quite a few interpreters regard chapter 13 as a unit. ${ }^{18}$ Others put a break before $13: 18$, before the author asks to pray for

[^2]him. ${ }^{19}$ The following solemn benediction closed by "Amen" $(13: 20-21)$ is even a better ending. The last four verses (13:22-25), introduced by the address "brothers", copy the conclusions of the Pauline letters and can be regarded as a short epistolary appendix to a treatise of non-epistolary character. ${ }^{20}$

Are there three or five main parts? We suggest that the chapters before the central section are divided into two main parts, and the chapters following it as well. In the first chapters, a new beginning is marked by the solemn address "holy brothers" (3:1), the first salutation in Hebrews, and by the shift to the imperative form: "consider Jesus, the apostle and high priest of our confession" (RSV). This caesura is also seen by most of those interpreters who begin the middle section in $4: 14$ or 5:11. ${ }^{21}$ The following passage is characterized as exhortation, either directly by several imperative and subjunctive forms (3:8, 12-13; 4:1, 11, 14, 16; 6:1) or indirectly in the form of desire (6:12-13), and the readers are addressed explicitly twice again (3:12; 6:9). After a short paragraph comparing Jesus and Moses (3:1-6) a longer passage follows (3:7-4:13), containing an exposition of Psalm 95:7-11. The psalm is first quoted (3:7-11), then interpreted as warning, promise and admonition about the Sabbath rest of God's people (3:12-19; 4:1-5, 6-11). Finally a general definition of the word of God summarizes the passage (4:12-13). The remaining seven paragraphs (4:14-6:20) belong together as a serious admonition to readers who are about to turn away from faith. It begins with an appeal to hold fast to Jesus the high priest $(4: 14-16)$ which is followed by a comparison between the priesthood of mortals and of Christ (5:1-4, 5-10). In the middle paragraph, readers are rebuked because they should be advanced Christians, but seem to be beginners (5:11-6:3). Second repentance is declared as impossible, but this statement is contrasted with trust in the eagerness of the readers (6:4-8, 9-12). God's oath to Abraham is referred to as an encouraging conclusion (6:13-20).

The first two chapters together form the first main part (1:1-2:18), a didactic one based upon a christological confession. Its topic is Christ's

[^3]unique position as Son and brother. Strictly speaking, the ethical instruction in $2: 1$ is not an exhortation. Its main clause does not use the imperative form, but the indicative mood of argumentation: "Therefore it is necessary that we pay much more attention to what we have heard. ${ }^{n 22}$ If the christological basis in 1:1-4 is interpreted in the following paragraphs, without a major caesura after the beginning, the whole passage forms a neatly concentric composition. Jesus' identity as the Son corresponds with that as a brother (1:1-4 / 2:14-18), the scriptural references about his superiority above the angels correspond with those about his temporary inferiority (1:5-14 / 2:5-13). In the center stands the logical conclusion that the word of Christ introduced in the very beginning (1:1-2) must be heard in all its forms (2:1-4).

The passages after the middle section are all exhortations and can be divided into two main parts: 10:19-12:29 and 13:1-21. ${ }^{23}$ Though in 13:1 a formal indication of a caesura is missing, the shift is obvious. Whereas chapters 1-12 deal with the special question of holding fast to the confession, now the keyword "mutual love" ( $\left.\varphi \uparrow \lambda \alpha \delta \varepsilon \lambda \varphi i^{\alpha} \alpha\right)$ at the beginning introduces a general exhortation containing detailed admonitions.

The principal exhortation in 10:19-12:29, initiated again by the new address "brothers", is connected with the cultic imagery of Hebrews: "Let us approach to the heavenly sanctuary" (10:22), and "let us look to Jesus, the pioneer and perfecter of our faith" (12:2). This main part consists of two hortatory subsections (10:19-39 / 12:1-29) framing the great narration about the witnesses of faith in the center (11:1-40). The first hortatory subsection has three paragraphs: an admonition to faith, hope and love, a warning of turning away from faith, and an encouragement to endurance (10:19-25, 26-31, 32-39). The "cloud of witnesses" (as chapter 11 is called in 12:1) can easily be divided into seven paragraphs and may be a concentric composition in itself: the definition of faith corresponding with the conclusion (11:1-3 / 11:39-40), the stories of Abel until Noah with the

[^4]summary of the stories since the epoch of the judges (11:4-7/11:32-38), and the faith of Abraham with the faith of Moses and his successors (11:816 / 11:23-31). The central paragraph in this understanding deals with Abraham's sacrifice of Isaac and with the other patriarchs until Joseph (11:17-22). Finally, the five paragraphs of the second exhortation are an appeal to continue in the struggle of faith with perseverance. Three paragraphs are hortatory in the strict sense (12:1-3, 12-17, 25-29). The two paragraphs in between give explanations in the indicative mood: on God's pedagogics of love and on the contrast of Moses' visible mountain and the heavenly Mount Zion (12:4-11, 18-24).

The last main part (13:1-21) contains general exhortations about interpersonal behavior and closes the composition before its epistolary appendix. Two of the five paragraphs talk about "your leaders", those who have taught them the faith and those who are in office (13:7-8, 17). This looks like a concentric composition, but the other paragraphs have their own topics: first the attitude to other Christians - in general, concerning marriage, concerning money (13:1-6), and at the end the request for intercession (13:18-21). The longer paragraph in the center picks up again the cultic imagery: in polemics against false teachings about food laws, in distinguishing the sacrifice of the high priest at the old sanctuary and that of Jesus outside the camp, and in admonishing to sacrifice of praise to God and sharing with other people (13:9-16).

In this outline the two main parts framing the central section (3:1-6:20 / 10:19-12:29) are linked in terms of concentric symmetry. Both are exhortations in the cultic language of Hebrews. The desired Christian behavior is described in relation to Christ's function as high priest. Some details show the concentric composition, especially at the two seams near the middle section. The access to the heavenly sanctuary through the curtain is mentioned in 6:19 ("enter[.] the inner shrine behind the curtain") and in 10:20 ("enter the sanctuary [...] through the curtain"); the curtain of the earthly sanctuary is described in the letter's very center (9:1-5). In the verses preceding and following the middle main part, the Christian life is summarized in the triad "love - hope - faith" (6:10-12) or, in the reversed order of chiasm, "faith - hope - love" (10:22-24). Such subtleties may indicate how carefully this unique writing was composed.

This analysis of Hebrews is summarized in the tabular appendix.

## Excursus: <br> Michael W. Martin's and Jason A. Whitlark's "Inventing Hebrews"

This significant monography on the structure of Hebrews published after completion of the manuscript deserves special attention in our context. ${ }^{24}$ It contains a very careful survey of the classical rhetorical handbooks applied to the whole and to almost all verses of Hebrews. The authors contend that Hebrews is structured according to five topics of the human lifespan (origin, birth, education, deeds, and death and posthumous events) listed by the "theorists" for characterizing persons (cf. 26-28) and transferred here to "the lifespan of a covenant" (32). The five sections are divided into two parts each. They begin with an epideictic narratio juxtaposing subjects of the old and the new covenant and "arguing for the superiority of the latter" (30), followed by a deliberative argumentatio, in each case representing "Hebrews's ultimately deliberative aim - namely to encourage perseverance in the faith and, correspondingly, to discourage apostasy" (75).

After 1:1-4 and 13:1-25 are defined as exordium and peroratio, 4:14-16 and 12:14-17 as secondary exordium and peroratio (referring to the sections in between), the five sections containing the "Disjointed narratio with argumentatio" are demarcated as follows (253):

1. "Covenant origins":
1:5-14
2:1-18
2. "Covenant births":
3:1-6
3:7-4:13
3. "Covenant education":
5:1-10
5:11-6:20
4. "Covenant deeds":
7:1-10:18 10:19-12:13
5. "Covenant death / events beyond death": 12:18-24 12:25-29

This is obviously a very sophisticated outline, but there are also some problems. The metaphorical use of biographical topics for subjects of the two covenants is not obvious in all instances and suspected of "squeezing the text into a mold in which it may not fit", ${ }^{25}$ although the authors would deny this, claiming that Hebrews represents traditional practices discussed in the rhetorical handbooks (13). The five sections vary in length very

[^5]much, the fourth covering more than half of the whole letter, the fifth just twelve verses. ${ }^{26}$ The weight of 7:1-10:18 (our middle section) is certainly undervalued when seen only as an "incidental narratio", in this case "setting the stage for something", ${ }^{27}$ here as in the other sections by demonstrating "the new covenant representative to be superior to the old" (146). Of course, Hebrews is a "word of exhortation" (13:22), that means deliberative. Yet it is hardly correct to say: "epideictic is ancillary, and deliberative, central" (254). The faith whose perseverance the letter encourages is made possible thanks to God's approachability, which is established by Christ's office and offer as heavenly high priest. Thus the epideictic parts, especially 7:1-10:18, are constitutive components of the argumentation. The internal theological connection of the soteriological and the ethical topics has not been sufficiently discussed by the authors. ${ }^{28}$

In regard to 2:1 the different interpretation is obvious. Here the verse "states in summary form the primary deliberative advice [...] not to commit apostasy" (109), whereas in our analysis it is seen not as an exhortation, but as a logical conclusion in a didactic, i.e. epideictic context. ${ }^{29}$ There is no need to revise this view, particularly as even the authors understand the verse as "logical proof [...] to demonstrate that a matter is true" (113). ${ }^{30}$

In general, one can understand the authors' joy of discovery when applying the categories of rhetoric to the text of Hebrews. They see so many similarities that the conclusion is almost inevitable: "Hebrews is comprehensively conventional in its rhetorical arrangement. [...] Hebrews exhibits the anticipated categories of classical rhetorical arrangement from beginning to end" (252). When analyzed, however, first in its own line of thought, then in comparison with the rules of classical rhetoric, the letter

[^6]may turn out to be much more unconventional, at least theologically, and perhaps even stylistically.

## 2. Introduction to Stichometry

Having analyzed the composition of the contents, the next step is analysis of the formal disposition. What can be observed concerning the length of the several parts and about their proportions? Clarification of how text size was measured in Greek and Roman antiquity is first required in preparation.

In poetry, it is easy to count the number of verses. For every book of Homer's two great works or Vergil's Aeneid, we know the exact number of hexameters. This is useful when an interpreter wants to refer to a certain line of a poem. It seems that authors took note of the number of lines already when disposing their opera. In Vitruvius (1st cent. BC) we read about Pythagoras and his disciples: "Pythagoras and those who came after him in his school thought it proper to employ the principles of the cube in composing books on their doctrines, and, having determined that the cube consisted of 216 lines, held that there should be no more than three cubes in any one treatise., ${ }^{31}$ Obviously they liked to dispose their writings according to mathematical relations; the cube number of 216 versūs (i.e. $6 \times 6 \times 6)$ is referred to, and a maximum size is defined as three times this number. It is not totally clear what Vitruvius or Pythagoras meant, but at any rate, it is an explicit instruction - the only one I know - that an author should count verses in order to give his book proper proportions.

We have, however, implicit proof. Horace in his Ars poetica divided the 476 hexameters into two parts using an old approximation to the golden ratio: the first 294 verses deal with poetry as art, the following 182 verses with the poet. These numbers are multiples of fourteen: $476=34 \times 14,294=$ $21 \times 14,182=13 \times 14.32$ The ratios $21 / 34$ and $13 / 21$ are very close to the

[^7]irrational value of the golden ratio $=0.6180339 \ldots$. ${ }^{33}$ The three numbers belong to a series of numbers already known in antiquity though in the 19th century named after the medieval mathematician Fibonacci. ${ }^{34}$ The oldest reference we can date - characterized by the numbers $3,5,8$ - is found in Nicomachus of Gerasa (2nd cent. AD). It is the last one of ten numerical sequences he presented as old tradition. ${ }^{35}$ Each number of this series is the sum of the two previous numbers, and the ratio of two following numbers is approximating the irrational golden ratio: $1,1,2,3,5,8,13,21,34 \ldots$

For prose texts, the ancients used a standard line of the same length as a hexameter verse. ${ }^{36}$ It is usually called stichos, sometimes $\sigma \tau i \chi o \varsigma ~ \dot{\eta} \rho \omega$ ккós or $\varepsilon$ ह̈лоऽ $\dot{\varepsilon} \dot{\xi} \dot{\alpha} \mu \varepsilon \tau \rho o v$ ("heroic line" or "hexameter verse"). ${ }^{37}$ The hexameter is defined by 6 feet of 2-3 syllables. It has between 13 and 17 syllables, i.e. 15 syllables on average. We can suppose this also for the original stichos of Greek prose. In Latin prose, the standard versus had 16 syllables, as did the Greek stichos in late antiquity. It is well documented that the stichos was used by publishers for paying the scribes and for calculating the prices. Librarians used it for determining the original size of a book. Stichometry also helped the readers to find a particular passage.

The stichometrical information can appear in three places: in the subscription after the text, or within the text, e.g. in biographies or lists of Biblical books. These two references contain the total number of a book's stichoi, the so-called "total stichometry". Further, in some manuscripts a

[^8]letter at the left margin marks every 100th or 50th line. For this so-called "marginal stichometry", the oldest biblical reference is Codex B 03 Vaticanus (4th cent.) in some books of the Old Testament. In the New Testament the codices of Euthalius' edition (perhaps late 4th cent.) number every fiftieth stichos. ${ }^{38}$ The oldest New Testament example of total stichometry is Papyrus 46 (early 3rd cent.); the subscription of Hebrews is $700 .{ }^{39}$ In Codex 01 Sinaiticus (4th cent.) the number 750 is subscribed, in later manuscripts mostly the number 703 , in some others 706,708 or 710 , once even $850 .{ }^{40}$ In an old list of Biblical books, the number 837 is transmitted. ${ }^{41}$

The differences between these numbers may originate in one of five ways. The difference of 703 and 750 can easily be explained by the use of a different stichos: 750 x 15 syllables are exactly 703.125 stichoi of 16 syllables. Obviously two different stichos standards were used at the same time for texts of the Greek Bible so that two different totals are transmitted, both the result of exact counting, as has also been demonstrated for other NT writings. ${ }^{42}$ A second way is that a different text basis is used. In the three verses Heb $2: 7 ; 3: 6 ; 8: 12$, for instance, the text of the Codices $\$ 01$ Sinaiticus, A 02 Alexandrinus and D 06 Claromontanus (4th-6th cent.) is longer by 31 syllables than the versions of Papyrus 46 and Codex B 03

[^9]Vaticanus; that makes about two stichoi, just one syllable more or less than the stichos standards of $2 \times 15$ or $2 \times 16$ syllables. In $11: 23$, Codex D 06 contains an addition of further 34 syllables, again more than two stichoi. Such fine differences may explain the numbers 700 or 706 etc. Thirdly, the manuscripts differ in the use of the abbreviated nomina sacra. Not all of them use all 15 abbreviations. We do not know how these abbreviations were treated stichometrically. It seems plausible, however, though hypothetical, to count each abbreviation as one syllable. If we take the four most common nomina sacra, 68 syllables are saved in Hebrews by $\bar{\Theta} \bar{\Sigma}$ etc. for $\theta \varepsilon$ ós, $14 \times 2$ syllables by $\bar{I} \bar{\Sigma}$ etc. for 'I $\eta \sigma o v ̄ \varsigma, 16 \times 2$ by $\bar{K} \bar{\Sigma}$ etc. for кúpıs and 12 by $\bar{X} \bar{\Sigma}$ etc. for $\chi \rho ı \sigma \tau$ ós; these 140 syllables together are $9: 05$ stichoi of 15 or $8: 12$ stichoi of 16 syllables. ${ }^{43}$ A fourth reason for the differences could be that the basis of counting is not the Greek text, but the translation into Latin or perhaps Syriac. As yet no research has been done in this respect. Lastly, scribes made mistakes, and quite a lot of strange numbers can be explained this way. Concerning Hebrews, the numbers 850 and 837 are outside the range of reasonable totals of Greek stichoi.

So far, the use of the stichos in prose is generally accepted among classical philologists. Yet not all of them are aware that it was also used by authors. It served as the standard measure in rhetorical instruction and in literary production. I mention only three important proofs: Menander Rhetor (3rd cent. AD) taught his students that a laudation for garlanding the emperor should not exceed 150 or 200 stichoi, a farewell address should not have more than 200 or 300 , a funeral address not more than 150 stichoi - "and nobody who is well disposed will blame you" (so verbatim concerning farewell address). ${ }^{44}$ Josephus ( 1 st cent. AD) estimated the size of his 20 books of Antiquities at 60,000 stichoi. ${ }^{45}$ Pliny the Younger (c. 100 AD ) writes to a penfriend that he expects a letter in response at least as long as his letter: "I will count not the pages only, but the versūs, too, and the syllables ${ }^{" 46}$ - counting lines as playful pleasure for leisure hours!

[^10]If we presume that the author of Hebrews applied the stichos, too, when disposing the letter - what can we observe? It is easy today to divide the text of the GNT on screen into lines of 15 syllables and count their sums. The results described in the following part are also listed in the last column of the table in the appendix.

## 3. Stichometry of Hebrews

Counted as a whole, without any paragraphs, the first main part (1:1-2:18) has $83: 13$ stichoi, the second one (3:1-6:20) 167:06 stichoi (the numbers after the colon indicating the additional syllables of the last line). That means, the second main part is exactly double the size of the first one: $83: 13 \times 2=167: 11$ stichoi. The difference is merely 5 syllables. Rounded up, we get 84 and 168 stichoi. I suggest using the number 21 as the common denominator, which seems to function as unit of measure or modulus for the whole disposition. It is a number of the Fibonacci series, as we have seen, and was also applied as modulus in other letters of the New Testament, according to other analyses. ${ }^{47}$ It will also appear in the other parts of Hebrews. The numbers here can be dissolved as $4 \times 21$ and $8 \times 21$. The two main parts together have $12 \times 21$ or 252 stichoi. This exact relation of $1 / 2$ in this precision can realistically be reached only by intention, not by chance. The author of Hebrews wanted to realize such a clear relation. It seems that he applied the stichos to reach this goal and used the numbers 8 and 21 deliberately. The stichometrical results confirm, by the way, the caesura put at $3: 1$. The new beginning is recognizable not only by the solemn address "holy brethren, partakers of the heavenly calling" (KJV), but also by the mathematical proportions.

The main part in the center (7:1-10:18) has exactly 228:08 stichoi. If we divide it into three paragraphs according to our analysis, with incomplete lines at the end, then we get 71:02, 79:09 and 77:12 or, rounded up, $72+80$ $+78=230$ stichoi. That is one stichos less than 231, which is the product of $11 \times 21$. On the other hand, the fourth main part (10:19-12:29) has 223:09 stichoi. If rounded up to 224 with the $50: 00$ stichoi of the last main part

[^11](13:1-21) added, the sum of these two main parts (10:19-13:21) is 274 or one stichos more than $13 \times 21=273$ stichoi. Thus if we take together also the first two main parts (1:1-6:20), Hebrews as a whole can be understood as a composition of three sections, containing almost exactly $12 \times 21,11 \times 21$ and $13 \times 21$ stichoi. In other words, the sum of the last three main parts (7:1$13: 21$ ) is $24 \times 21=504$ stichoi (exactly 502:02), and the relation between the two first and the three following main parts is $12 / 24$ or $1 / 2$ again - as already between the first two main parts (1:1-6:20). This is even true when using the exact numbers: the size of the first two main parts is 251:04 stichoi together, the double size would be 502:08 - just 6 syllables more than the exact sum. If the same simple relation appears twice, does it seem probable that it has happened by chance? Is it not rather probable that the author has disposed the letter intentionally in this way.

There is a small blemish in this result. In the text of Nestle-Aland/GNT the last main part 13:1-21 has 50:04 stichoi, four syllables more than the 50:00 stichoi of our calculation. It is the only instance of Hebrews where the GNT text has been emended. In the doxology of 13:21 ( $\hat{\dot{\varphi}} \dot{\eta} \delta o ́ \xi \alpha$ عis $\tau 0 v ̀ \varsigma \alpha i \omega ิ v \alpha \varsigma \tau \hat{\omega} \nu \alpha i \omega ́ v \omega v$, "to whom be the glory forever and ever") the two words $\tau \hat{\omega} v \alpha i \omega ́ v \omega v$ ("and ever") are included in square brackets. Metzger in his textual commentary on this verse has described the different wordings of related doxologies in detail. There are good reasons to accept the one or the other version. The copyists could have added the two words (so in the codices $\aleph, ~ A, C^{*}, 33$ et al.) as well as omitted them (in $\mathfrak{P}^{46}, \mathrm{D}, \Psi$ et al.). The committee responsible for the GNT "was disposed to prefer the shorter text as original" as Metzger recorded. Yet because of the weighty witnesses the two words were retained and enclosed within square brackets "as an indication that they might be a gloss". ${ }^{48}$ The stichometrical analysis may corroborate this evaluation.

The above considerations refer to the corpus of Hebrews until the "Amen" in 13:21. Its sum is $36 \times 21=756$ stichoi (of 15 syllables). Now the epistolary conclusion ( $13: 22-25$ ) has to be added. The four verses have 7:09 or, rounded up, 8 stichoi. They are obviously an appendix, even in terms of stichometry. They do not belong to the original disposition and do not fit to the modulus of 21 stichoi. We have to separate them from the corpus, but we do not know, of course, whether they were added by the

[^12]author himself or by a later editor. At any rate, the total stichometry of Hebrews results in $756+8=764$ stichoi. This number corresponds with the above mentioned number 750 in Codex Sinaiticus, if we consider that the text without any paragraph consists of only 761:00 stichoi and that at least 9:05 stichoi were saved by the abbreviated nomina sacra. It is remarkable how accurately the stichometrical totals are calculated in the manuscripts.

Stichometry, it seems, was even used for more sophisticated proportions in Hebrews. The two hortatory sections are approximately in the golden ratio, with the second main part (3:1-6:20) containing $8 \times 21$ stichoi, and the fourth and fifth main parts together (10:19-13:21) containing $13 \times 21$ stichoi. The sum of all three hortatory sections is $21 \times 21$ stichoi. There is a similar relation within the second main part. Its middle part (3:7-4:13), dealing with the promised rest, has exactly $63=3 \times 21$ stichoi, and the surrounding parts (3:1-6 +4:14-6:20) have together $105=5 \times 21$ stichoi. Thus we get a series of five Fibonacci numbers within the formal disposition of Hebrews: $3,5,8,13$, and 21 - all connected with the modulus of 21 stichoi.

Perhaps one can see an intentional design also concerning the corresponding middle subsections of the second and fourth main parts. Both focus on Old Testament references, the first on the promised rest for the people of God (3:7-4:13), then on the great cloud of witnesses of faith (11:1-40). The first one has $62: 12$ stichoi or, rounded up, $63=3 \times 21$, as we have seen; the second one has 102:12 stichoi or, rounded off, $102=3 \times 34$, and 34 is the next number in the Fibonacci series after 21.

It is hard to believe that all these relations have happened incidentally though the idea of an apostle counting lines sounds quite strange. Yet the stichometrical reconstruction of the letter's disposition is based on data that cannot be called into question. The comparable analyses of all writings of the New Testament has brought forth many similar observations. So far, results have be published on Ephesians, Mark, the two small letters of John, and Romans. ${ }^{49}$ Articles on 2 Corinthians and Matthew are being prepared.

[^13]
## 4. Sanctuary and Proportions

There may be a specific concept behind this kind of disposition. These concluding remarks are meant as a reminder of a traditional metaphor linking the human body and a literary opus. We still use the Latin term corpus in order to refer to the essential part of a book or a letter, distinguishing it from prologue and epilogue. In antiquity, this body metaphor is documented many times. An old reference is in Plato. ${ }^{50}$

Every speech ( $\lambda$ ó $\gamma$ o̧) must be put together
like a living creature, with a body $(\sigma \hat{\omega} \mu \alpha)$ of its own;
it must be neither without head nor without legs;
and it must have a middle and extremities
that are fitting both to one another and to the whole in the written work.
The phrase "have a middle and extremities" ( $\mu \varepsilon ́ \sigma \alpha$ $\tau \varepsilon$ દ̌ $\chi \varepsilon ו v ~ \kappa \alpha i ̀ ~ \alpha ̈ \kappa \rho \alpha) ~$ seems to allude to the Greek term of the golden ratio: "divide in the middle
 were apparently accustomed to dispose their books in such a way. Several examples have been detected in Plato, Isocrates, Thucydides (5th/4th cent. BC ) or Lucian (2nd cent. AD), but so far only on the basis of print lines in modern editions. ${ }^{52}$ The results might considerably be refined by applying the ancient stichos and the numbers of the Fibonacci series. In Hebrews, at least, we found the relation $3 / 5$ within the second main part (3:1-6:20), the relation $8 / 13$ between the hortatory sections 3:1-6:20 and 10:19-13:21, and the relation $21 / 34$ between the two subsections with scriptural references in 3:7-4:13 and 11:1-40.

The body metaphor is used by Vitruvius also concerning the design of temples: ${ }^{53}$

Without symmetry and proportion (symmetria atque proportione)
there can be no principles in the design of any temple;
that is, if there is no precise relation between its members,
as in the case of those of a well shaped man.

[^14]Some sentences later, Vitruvius describes the proportions of "a well shaped man", a description Leonardo da Vinci interpreted in his famous drawing about human symmetry. In another context Vitruvius uses the relations $5 / 3$ and $3 / 2$ in order to define length and width of an atrium. ${ }^{54}$ These are numbers of the Fibonacci series, but he does not indicate any knowledge of the golden ratio.

Plato's phrase "fitting to one another and to the whole" contains a common principle in the philosophical debate on beauty. Galen ( 2 nd cent. AD ), for instance, refers to the Stoic Chrysippus (3rd cent. BC) and the sculptor Polycleitus (5th cent. BC): ${ }^{55}$
... he believes that beauty does not lie
in the proportion ( $\sigma \nu \mu \mu \varepsilon \tau \rho i \alpha)$ of the elements but of the members:
of finger, obviously, to finger, of all fingers to palm and wrist, of these to forearm, of forearm to upper arm, and of all to all, as is written in Polycleitus' canon.
Although it is questioned among the philosophical schools whether beauty can generally be defined by the $\sigma v \mu \mu \varepsilon \tau \rho i \alpha$ and the proportions among the parts and between the parts and the whole, this definition is widely accepted at least concerning the beauty of the human body. ${ }^{56}$ The sculptures of Polycleitus are regarded as perfect realizations of his written (but unfortunately lost) canon. The beauty of a literary corpus may be recognized as well by observing the relations of the parts to each other and to the whole.

Concerning Ephesians it has been demonstrated how the author, using the imagery of body and building for presenting his theology, disposed the letter stichometrically in exact axial symmetry. ${ }^{57}$ It seems that he knew this tradition that can be traced back to Vitruvius and Plato.

[^15]In Hebrews we see how the beginning and the end "fit together" like head and feet, being the letter's smallest parts; the longest part is in the center, and the modulus 21 helps to relate the parts to each other and to the whole. The treatise about Christ's heavenly sanctuary is not built up in the same accurate axial symmetry as Ephesians. The relation of the first two parts, however, is exactly $1 / 2$, and it is the same as the relation of these two parts to the whole, realized on the basis of $4 \times 21$ stichoi. This meets the traditional criterion of beauty quite accurately. It seems that the elaborated disposition is supposed to give the letter to the Hebrews an esthetic quality. ${ }^{58}$

## Appendix:

## Table of Contents and Stichometry of Hebrews

[^16]| Hebrews Chapters | Parts Contents | stichoi |
| :---: | :---: | :---: |
| 1:1-2:18 | 1. Basis: Confessing Jesus as Son of God | 83:13 |
| 1:1-4 | 1.1 Confession: God's Son as God's first and last word | 11:04 |
| 1:5-14 | 1.2 Scripture 1: Superiority of God's Son above the angels | 25:02 |
| 2:1-4 | 1.3 Consequence: Obligation to listen to the Lord's word | 11:02 |
| 2:5-13 | 1.4 Scripture 2: God's Son as temporarily inferior and human brother | 23:05 |
| 2:14-18 | 1.5 Consequence: The Son's incarnation as basis of salvation | 13:00 |
| 3:1-6:20 | 2. Exhortation: Call to faithfulness against apostasy | 167:06 |
| 3:1-6 | 2.1 Appeal: Call to focus on Jesus the high priest | 3:11 |
| 3:7-4:13 | 2.2 Scip | 62:12 |
| 3:7-11 | 2.2.1 Scripture: Psalm 95:7-11, an appeal to listen to God's voice | 9:14 |
| 3:12-19 | 2.2.2 Exposition 1: As warning of apostasy and of loss of the future rest | 17:13 |
| 4:1-5 | 2.2.3 Exposition 2: As promise of future rest for believers | 13:12 |
| 4:6-11 | 2.2.4 Exposition 3: As admonition to obey God's voice | 14:01 |
| 4:12-13 | 2.2.5 Conclusion: God's word as judge of the hearts | 7:02 |
| 4:14-6:20 | 2.3 Serious appeal: Faithfulness to Christ versus apo | 90:13 |
| 4:14-16 | 2.3.1 Admonition: Call to hold fast to Jesus, the great high priest | 8:08 |
| 5:1-4 | 2.3.2 Explanation 1: High priests of mortals as compassionate and weak | 9:04 |
| 5:5-10 | 2.3.3 Explanation 2: Christ proclaimed high priest like Melchizedek | 13:11 |
| 5:11-6:3 | 2.3.4 Side note: The following for advanced Christians, not for beginners | 17:13 |
| 6:4-8 | 2.3.5 Thesis: Impossibility of a second repentance after apostasy | 12:05 |
| 6:9-12 | 2.3.6 Conclusion: Diligence of the addressees in love, hope and fa | 10:05 |
| 6:13-20 | 2.3.7 Confirmation: God's oath to Abraham as guarantee to future hope | 18:12 |
| 7:1-10:18 | 3. Exposition: Jesus as the high priest of the new covenant | 228:08 |
| 7:1 | 3.1 Christ's office: High priest like Melchizedek, not like | 1:02 |
| 7:1 | 3.1.1 Narration: Melchizedek - king and priest in Abraham's time | 10:07 |
| 7:4-10 | 3.1.2 Exposition 1: Superiority of Melchizedek's priesthood, not Aaron's | 15:10 |
| 7:11-19 | 3.1.3 Exposition 2: Perfectness of Melchizedek's priesthood | 21:07 |
| 7:20-25 | 3.1.4 Exposition 3: Permanent priesthood by God's oath in Ps 110 | 12:10 |
| 7:26-28 | 3.1.5 Summary: Christ qualified as high priest once for all | 10:13 |
| 8:1-9:14 | 3.2 Christ's sanctuary: Heavenly, not earthly tent of the new | 79:09 |
| 8:1-6 | 3.2.1 Thesis: Christ as high priest at the true tent in heaven | 16:13 |
| 8:7-13 | 3.2.2 Scripture: Jer 31:31-34, distinguishing old and new covenant | 22:13 |
| 9:1-5 | 3.2.3 Narration: Description of the earthly tent of the first covenant | 12:12 |
| 9:6-10 | 3.2.4 Exposition 1: Sacrifices at this tent as signs of the present time | 14:02 |
| 9:11-14 | 3.2.5 Exposition 2: Christ in the heavenly tent as redeemer once for all | 12:14 |
| 9:15-10:18 | 3.3 Christ's sacrifice: Forgiveness of sins through Christ's own blood | 77:12 |
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| 9:23-28 | 3.3.2 Application 1: Christ sacrificed once for the removal of sin | 17:13 |
| 10:1-4 | 3.3.3 Application 2 : Sacrifice of animals only for the reminder of sins | 9:11 |
| 10:5-10 | 3.3.4 Scripture: Psalm 40:7-9 pointing to Christ's sacrifice once for all | 13:05 |
| 10:11-18 | 3.3.5 Conclusion: Forgiveness of sins through the one sacrifice of Christ | 17:03 |


| 10:19-12:29 | 4. | Exhortation: Call to faithfulness in the struggle of faith | 223:09 |
| :---: | :---: | :---: | :---: |
| 10:19-39 | 4.1 | Appeal: Approach to the high priest Jesus with faith, hope and love | :03 |
| 10:19-25 | 4.1.1 | Admonition: Faith, hope and love as responses to Christ's sacrifice | 15:05 |
| 10:26-31 | 4.1 | Warning: God's judgment as consequence of apostasy | 14:04 |
| 10:32-39 | 4.1.3 | Encouragement: Call to confidence and endurance | 17:09 |
| 11:1-40 | 4.2 | Narration: Exemplary witnesses of faith in the Old Testament | 102:12 |
| 11:1-3 | 4.2 | Definition: Faith as conviction of things not seen | 5:00 |
| 11:4-7 | 4.2 | Abel, Enoch, Noah: Impossibility to please God without faith | 15:06 |
| 11:8-16 | 4.2 | Abraham und Sara: Faith as longing for the heavenly city | 25:07 |
| 11:17-22 | 4.2 | Abraham, Isaac, Jacob, Joseph: Faith hoping for life beyond death | 13:01 |
| 11:23-31 | 4.2.5 | Moses: Significance of faith during the exodus from Egypt | 20:06 |
| 11:32-38 | 4.2.6 | Summary: Judges, kings and prophets as witnesses of faith | 19:12 |
| 11:39-40 | 4.2.7 | Conclusion: God's promise not yet fulfilled for all these witnesses | 3:10 |
| 12:1-29 | 4.3 | Appeal: Call for perseverance in the struggle of faith | 73:09 |
| 12:1-3 | 4.3.1 | Admonition 1: Call for the struggle of faith following Jesus' tracks | 11:09 |
| 12:4-11 | 4.3.2 | Explanation 1: Sufferings in faith as part of God's love pedagogics | 20:05 |
| 12:12-17 | 4.3.3 | Admonition 2: Call for readiness in faith and for peace to others | 14:00 |
| 12:18-24 | 4.3 | Explanation 2: Heavenly city as goal of faith, not the visible Sinai | 15:02 |
| 12:25-29 | 4.3.5 | Peroration: Call for listening to God and serving him thankfully | 12:08 |
| 13:1-21 | 5. | General Exhortations: Behavior to others and to teachers | 50:00 |
| 13:1-6 | 5.1 | Social behavior: Brotherly love, sexual ethics, contentment | 11:00 |
| 13:7-8 | 5.2 | Behavior to teachers: Thankful memory in faithfulness to Christ | 4:09 |
| 13:9-16 | 5.3 | Non-cultic sacrifices: Praise of God and sharing with humans | 18:12 |
| 13:17 | 5.4 | Behavior to leaders: Acceptance of their responsibility | 4:04 |
| 13:18-21 | 5.5 | Spiritual fellowship: Plea of prayers and good conduct, benediction | 11:05 |
| 13:22-25 | 6. | Epistolary appendix: The letter's object, on Timothy, greetings | 7:09 |
| 1:1-13:25 | 1.-6. | Hebrews: Treatise on the access to God by Christ's sacrifice | 761:00 |

Explanation of the appendix. The table contains the headings of the letter's 52 textual units, presented in six main sections three of which consist of three major parts each. The last column refers to the numbers of stichoi, the standard lines of Greek prose texts with 15 syllables. Before the colon the full stichoi are registered, after the colon the numbers of the additional syllables.


[^0]:    1 Revised version of a paper prepared for the International SBL-Meeting in Berlin, 10 August 2017, Section "Epistle to the Hebrews". I wish to thank Dr. Beverly OlsonDopffel, Heidelberg, for linguistic assistance.
    2 See H. Braun, An die Hebräer (HNT 14; Tübingen: Mohr, 1984) 16; L.T. Johnson, Hebrews (NTL; Lousville, KY: Westminster, 2006) viI-viII, 11; B. Witherington,

[^1]:    ${ }^{10}$ See E. Gräßer, An die Hebräer (Hebr 1-6) (EKK 17/1; Zürich/Braunschweig: Benziger / Neukirchen-Vluyn: Neukirchener, 1990) 29; Strobel, Hebräer, 75; P. Vielhauer, Geschichte der urchristlichen Literatur (Berlin: de Gruyter, 1975) 238239; cf. C.R. Koester, Hebrews (AB 36; New York: Douboeday, 2001) 85: 7:110:39.
    ${ }^{11}$ The Biblical quotes follow, unless explicitly stated, the translation of NRSV.
    ${ }^{12}$ See e.g. Gräßer, Hebräer, 1:29; Weiß, Hebräer, 8-9: only two major parts 7:1-28; 8:1-10:18, the second one divided into three sub-sections by E. Gräßer, An die Hebräer (Hebr 7,1-10,18) (EKK 17/2; Zürich: Benziger / Neukirchen-Vluyn: Neukirchener, 1993) IX-X (beginning in $8: 1 ; 9: 1 ; 10: 1$ ) or into seven by Weiß (beginning additionally in $8: 7 ; 9: 11,15,24$ ).
    ${ }^{13}$ See e.g. Vanhoye, Structure littéraire, 284; Hegermann, Hebräer, 141: three major parts 7:1-28; 8:1-9:28; 10:1-18.
    ${ }^{14}$ Cf. G. Gelardini, "From 'Linguistic Turn' and Hebrews Scholarship to Anadiplosis Iterata: The Enigma of a Structure," HTR 102 (2009) 51-73, here 63, 72: three major parts in 7:1-10:18, the third one also beginning in $9: 15$, and also referring to

[^2]:    "priesthood", "sanctuary" and "sacrifice", but the letter's center is located in 8:7-13 because of the topic "new covenant".
    ${ }^{15}$ The importance of the local aspect in the letter's imagery has already been worked out by: E. Käsemann, Das wandernde Gottesvolk: Eine Untersuchung zum Hebräerbrief (FRLANT 55; Göttingen: Vandenhoeck, 1939) 18-19.
    ${ }^{16}$ Similarly Hegermann, Hebräer, 142.
    ${ }^{17}$ For 1:1-3 see Strobel, Hebräer, 17; for 1:1-4 see Allen, Hebrews, 93; Attridge, Hebrews, 19; Backhaus, Hebräerbrief, 43; Guthrie, Hebrews, 39; O’Brien, Hebrews, 44.
    ${ }^{18}$ See Cockerill, Hebrews, 80-81; J. Girdwood and P. Verkruyse, Hebrews (College Press NIV Comm.; Joplin, MO: College Press, 1997) 24; Kuss, Hebräer, 256; O'Brien, Hebrews, 502; Strobel, Hebräer, 173; Witherington, Hebrews, 352-353.

[^3]:    ${ }^{19}$ See Kümmel, Einleitung, 345; Vielhauer, Urchristliche Literatur, 239; Weiß, Hebräer, 746.
    ${ }^{20}$ See Allen, Hebrews, 94; Gräßer, Hebräer, 1:16-18; 3:409; Koester, Hebrews, 85.
    ${ }^{21}$ For 3:1-4:13 see Bruce, Hebrews, viII; Guthrie, Hebrews, 125; for 3:1-5:10 see Attridge, Hebrews, 19; Spicq, Hebreux, 2:441; Vaganay, "Plan," 272; Vanhoye, Structure littéraire, 86.

[^4]:    ${ }^{22}$ Own translation; cf. Gräßer, Hebräer, 1:99-100: The argumentation "hat einen [...] logisch-rationalen Grundzug"; differently e.g. W.G. Übelacker, Der Hebräerbrief als Appell I: Untersuchungen zu exordium, narratio und postscriptum (Hebr 1-2 und 13,22-25) (ConBNT 21; Stockholm: Almqvist, 1989) 156: Hebr 2:1-4 as "die erste Paränese".
    ${ }^{23}$ For the division 10:19-12:29 / 13:1-21 see also Bruce, Hebrews, IX-X; similarly, but without shift before 13:22: Backhaus, Hebräerbrief, 11; Cockerill, Hebrews, 80; Spicq, Hébreux, 1:442.

[^5]:    ${ }^{24}$ M.W. Martin and J.A. Whitlark, Inventing Hebrews: Design and Purpose in Ancient Rhetoric (SNTSMS 171; Cambridge: CUP, 2018); the numbers in brackets refer to the pages of the book.
    ${ }^{25}$ D.A. DeSilva, Perseverance in Gratitude: A Socio-Rhetorical Commentary on the Epistle "to the Hebrews" (Grand Rapids, MI: Eerdmans, 2000) 46, quoted approvingly by Martin/Whitlark, Inventing, 13 n. 42.

[^6]:    ${ }^{26}$ According to the following stichometrical analysis the section 7:1-12:13 contains 412 of the letter's 764 stichoi $=54 \%$, the section 12:18-29 only 27 stichoi $=3.5 \%$.
    ${ }^{27}$ Rhet. Her., 1.12 (trans. Caplan, LCL): alicuius apparationis causa (last one of four purposes).
    ${ }^{28}$ It is mentioned at least in the very last "conclusion" (259): "The new covenant mediated by Jesus and his priestly ministry [...] deals with the problem of human sin and faithlessness, which would otherwise keep God's people from inheriting God's eschatological promise (cf. 9:14-15)."
    ${ }^{29}$ See above n. 22.
    ${ }^{30}$ When 2:1 is listed among the verses using "the hortatory subjunctive, 'let us' " (262), it is obviously a mistake, for in the subordinate clause $\mu \dot{\eta} \pi \sigma \tau \varepsilon \pi \alpha \rho \alpha \rho \nu \hat{\omega} \mu \varepsilon \nu$ ("so that we do not drift away") the subjunctive is dependent on $\mu \dot{\eta} \pi \sigma \tau \varepsilon$.

[^7]:    ${ }^{31}$ Vitruvius, Arch. 5.preface.3: Etiamque Pythagorae quique eius haeresim fuerunt secuti, placuit cybicis rationibus praecepta in voluminibus scribere, constitueruntque cybum CCXVI versus eosque non plus tres in una conscriptione oportere esse putaverunt (trans. M.H. Morgan; Cambridge, MA: HarvardUP, 1914).
    ${ }^{32}$ See F. Sbordone, "La poetica oraziona alla luce degli studi più recenti," in $A N R W$ 2.31 .3 (1981) 1866-1920, here 1902.

[^8]:    ${ }^{33}$ See $13 / 21=0.6190476 \ldots, 21 / 34=0.6176470 \ldots$.
    ${ }^{34}$ The name was given to the series by É. Lucas, after Fibonacci's = Leonardo's book had been printed the first time; see Leonardus [Pisanus], Il liber abbaci (ed. B. Boncompagni; Rome: Scienze Matematiche e Fisiche, 1857) 283-284; E. Lucas, "Recherches sur plusieurs ouvrages de Léonard de Pise," in Bulletino di bibliografia e di storia delle scienze matematiche e fisiche 10 (Rome 1877) 129-193, 239-293, here 135.
    ${ }^{35}$ See Nicomachus, Introd. arithm. II 28.6, 10; cf. Iamblichus (c. 300), In Nicom. arithm. intr. (ed. Pistelli/Klein) 117.20-23; 118.9-18: the tenth place is chosen by Nicomachus not by chance, for ten is supposed to be a "perfect number" in Pythagorean tradition.
    ${ }^{36}$ For a more detailed introduction with more ancient references see: F.G. Lang, "Schreiben nach Maß: Zur Stichometrie in der antiken Literatur," NovT 41 (1999) 40-57; idem, "Adam - Where to Put You? The Place of Romans 5 in the Letter's Composition," in Textual Boundaries in the Bible: Their Impact on Interpretation (ed. M.C.A. Korpel and P. Sanders; Pericope 9; Leuven: Peeters, 2017) 189-218, here 195-204.
    ${ }^{37}$ Both terms are used by: Galen, Plac. 8.1.22-25 (CMG 5.4.1.2); see H. Diels, "Stichometrisches," Hermes 17 (1882) 377-384, here 378-379.

[^9]:    ${ }^{38}$ See L. A. Zacagnius, Collectanea Monumentorum Veterum Ecclesiae Graecae, Ac Latinae Quae hactenus in Vaticana Bibliotheca delituerunt (Roma: Sacra Congregatio de Propaganda Fidei, 1698) 674-685 ad Hebrews: the marginal number 450 is missing, the total in the subscription is 703; cf. 540-541: the sum of the three lectiones (beginning in $1: 1 ; 7: 11 ; 11: 1$ ) is $257+232+212=701$ stichoi.
    ${ }^{39}$ F.G. Kenyon, The Chester Beatty Biblical Papyri, vol. 3 Suppl., Pauline Epistles: Text (London: Walker, 1936) xii; cf. xv: "The stichometrical notes ... are in a hand which can be assigned to the third century and may be early in it."
    ${ }^{40}$ See T. Zahn, Geschichte des Neutestamentlichen Kanons (II/1; Erlangen/Leipzig: Deichert, 1890) 394, 396 n. 19; Zahn relates "die hohe Ziffer 830 " of Cod. 88 (number of Gregory's list), but in the microfilm of the Codex the number is clearly $\omega v=850$ (confirmed by Marie-Luise Lakmann, INTF Münster).
    ${ }^{41}$ See C. Markschies, "Haupteinleitung," in Antike christliche Apokryphen in deutscher Übersetzung I/1 (ed. idem and J. Schröter; Tübingen: Mohr, 2012) 1-180, here 133: Syriac list from Sinai (4th cent.).
    ${ }^{42}$ See F.G. Lang, "Ebenmass im Epheserbrief: Stichometrische Kompositionsanalyse," NovT 46 (2004) 143-163, here 157; idem, "Maßarbeit im Markus-Aufbau: Stichometrische Analyse und theologische Interpretation, Teil 1," BN 140 (2009) 111-134, here 118; idem, "Disposition und Zeilenzahl im 2. und 3. Johannesbrief: Zugleich eine Einführung in antike Stichometrie," BZ 59 (2015) 54-78, here 58; idem, "Adam - Romans 5," 211-212.

[^10]:    ${ }^{43}$ See K. Aland, ed., Vollständige Konkordanz zum griechischen Neuen Testament, vol. 2 (ANTF 4; Berlin: de Gruyter, 1978) 1-304, here 131, 137, 167, 301.
    ${ }^{44}$ See Menander Rhet. (ed. D.A. Russell and N.G. Wilson, Oxford: OUP, 1981) 423.3-
    
    45 Josephus, A.J. 20.267: 20 books of 60,000 stichoi ( $\varepsilon \xi \xi \delta \dot{\varepsilon} \mu v \rho ı \alpha ́ \sigma ı ~ \sigma \tau i ́ x \omega v), ~ i . e . ~ 3,000 ~$ stichoi for one book on average (rounded up generously!).
    ${ }^{46}$ Plinius, Ep. 4.11.16: ego non paginas tantum, sed versūs etiam syllabasque numerabo.

[^11]:    ${ }^{47}$ See e.g. Lang, "Ebenmaß," 156: about Ephesians; idem, "Adam - Romans 5," 212213: about James, 1 Peter; idem, "Remarkable Proportions in the Disposition of 2 Corinthians," $C B Q$ (forthcoming).

[^12]:    ${ }^{48}$ See B.M. Metzger, A Textual Commentary on the Greek New Testament (Corrected edition; Stuttgart: United Bible Societies, 1975) 677.

[^13]:    ${ }^{49}$ See above n. 42. For the rest of the NT see: www.stichometry.de.

[^14]:    ${ }^{50}$ Plato, Phaid. 264c (trans. after A. Nehamas and P. Woodruff).
    ${ }^{51}$ Euclides, Elem. 6.30; cf. F. Seck, "Die Komposition des 'Panegyrikos'," in Isokrates (ed. idem; WdF 351; Darmstadt: WBG, 1976) 353-370, here 365-366.
    ${ }^{52}$ See the overview in Lang, "Adam - Romans 5," 200-202.
    ${ }^{53}$ Vitruvius, Arch. 3.1.1 (trans. M.H. Morgan); cf. 3.1.3: proportions of the human body.

[^15]:    ${ }^{54}$ Vitruvius, Arch. 6.3.3.
    ${ }^{55}$ Galen, Plac. 5.3.15 (CMG 5.4.1.2; trans. P. de Lacy).
    ${ }^{56}$ See A. Celkyte, "The Stoic Definition of Beauty as Summetria," ClQ 67 (2017) 88105; 89-90; cf. H.-J. Horn, "Stoische Symmetrie und Theorie des Schönen in der Kaiserzeit," $A N R W$ 2.36.3 (1989) 1454-1472, here 1456; A. Schmitt, "Symmetrie und Schönheit: Plotins Kritik an hellenistischen Proportionslehren und ihre unterschiedliche Wirkungsgeschichte in Mittelalter und Früher Neuzeit," Neuplatonismus und Ästhetik (eds. V.O. Lobsien and C. Olk; Berlin; Transformationen der Antike 2; Berlin: de Gruyter, 2007) 59-84, here 61.
    ${ }^{57}$ See Lang, "Ebenmass," 161-163.

[^16]:    ${ }^{58}$ Cf. Backhaus, Hebräerbrief, 50: "zur Überzeugungskraft des Glaubens (zählt) für unseren Vf. nicht zuletzt die Schönheit" - a judgment, however, based upon a somewhat different structuring.

