Runic Number Mysticism and Its Ancient Model

Sigurd Agrell

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TRAD TION

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This work is dedicated to

my brother

Harald Agrell.

FOREWORD

The work hereby presented to the public will probably appear to most people who are familiar with the author's previous work as a bold attempt to venture into new areas that were previously completely foreign to him. I will not deny that what I have undertaken is in many ways a new endeavor, requiring study and painstaking research. However, for me, this undertaking has not only been a departure into new territory, but also a return to familiar and long-cherished surroundings. The figures of the ancient Norse pantheon, the poetry of the Edda songs, and the mystery of the runic script captivated my mind even as a boy, and by dedicating this work to a person who has been close to me during this time, I have wanted to pay tribute to our shared childhood in the mountainous countryside of Värmland.

The future will tell how successful I have been in this endeavor. What is certain, in any case, is that if I have made some progress on the difficult path toward the darkness of times past, I owe a debt of gratitude to the place where I spent my formative years, the peaceful city of Lund, with its pleasant library and its selflessly helpful scholars. Discussions in connection with three lectures I gave at the Philological Society and the Philological Association in Lund (autumn 1925) have been extremely instructive for me. In private conversations, I have also received much valuable information from colleagues and friends. I am primarily indebted to the Nordic and Germanic scholars: Professors Axel Kock, Ernst A. Kock, Elof Hellquist, Emil Olson, and Associate Professors Jöran Sahlgren

It is with sadness that I have just put away the pages he reviewed. May peace rest upon the memory of his loyal and bright personality!

<div align="right">Lund, June 6, 1927.</div>

<div align="right">*The author.*</div>

CHAPTER I

THE LETTER MAGIC OF LATE ANTIQUITY

1. In ancient Germanic linguistic monuments, including Wulfila's translation of the Bible, the word *runa* has the meanings 'mystery, secret' and 'magical sign'. Even today, the New Norwegian verb *runa* is synonymous with 'to divine, to practice sorcery'. The old Icelandic sagas tell us that our ancient Norse ancestors believed that by carving certain runes on objects, they could exert magical powers for good or evil. It is also mentioned that a mistake in the carving of just one or two runes could produce the exact opposite effect to that intended. In this case, the story of the failed runic inscription on a smoothed whale bone, placed under the headboard of a peasant girl in Värmland, as recounted in Egil Skallagrimsson's saga (chapter 72), is instructive. Recently, the great importance of the magical element in the origin and use of Germanic runes has also been emphasized by a number of researchers. Cf. Schröder, Neuere Runenforschung, Germ.-rom. Monatsschrift 10, p. 4. L. Wimmer had already suggested, based on the peculiar order, names, and number of the runes, that they served a magical purpose Die Runenschrift p. 142: "nicht bloss als Buchstabenschrift, sondern auch und vielleicht wesentlich zu magischem Gebrauche" (not only as an alphabet, but also, and perhaps primarily, for magical purposes). Later research has sought to prove this idea. In the work "Om Troldruner" (On Troldrunes), the prominent Norwegian runologist Magnus OlsenFordomtima. Series of writings published by O. Lundberg.

has shown that a number of runic inscriptions of a clearly magical character contain a specific number of runes in sequence: groups of 24 runes, 8 runes, and 40 runes. According to Olsen's research, certain magical songs preserved in Icelandic sagas, when restored to the orthography of the time, provide similar evidence: the verses appear to contain 72 runes = 3 x 24 characters. Of particular interest to the question of the connection between runic magic and the letter mysticism of other peoples is Olsen's observation concerning a late Roman magical inscription: that in this one line there are 12 letters and in the other exactly twice that number, i.e. 24, is probably not a coincidence (cf. below p. 8).

As we know, the runes are borrowed from Greek and Roman writing. If this borrowing was mainly for magical purposes, the number mysticism that governed the combination of the oldest runes in the creation of magical inscriptions must also be borrowed from the late antique cultural world. Anyone who wants to uncover the magical secret of the runes should therefore study the Latin and Greek inscriptions of a mystical nature from the Roman Empire. If certain numerical symbolic principles can be found here, one has every right to assume that the same or closely related methods were used by the practitioners of the oldest Germanic runic magic in their concise inscriptions on amulets, weapons, and various tools.

In his study, Magnus Olsen has linked this to the interesting essay on "alphabet magic" by the religious historian Albrecht Dieterich, published at the beginning of this century (Dieterich, ABC-Denkmäler (Rheinisches Museum 56, 1901, p. 77 ff.); the essay has been reprinted with some additions in Dieterich's

Kleine Schriften, pp. 202 ff. Two decades later, Franz Boll's disciple Franz Dornseiff devoted an entire dissertation to the same subject Dornseiff, Das Alphabet in Mystik und Magie (1922), *ΣΤΟΙΧΕΙΑ*, Heft 7 (2nd ed., 1925, identical to the 1st ed. on pp. pp. 1–168, differing from it only in 22 pp. of "Nachträge und Berichtigungen" (Addenda and Corrections). Only when referring to the additions is a specific reference to the second edition necessary. The dissertation, which is based on Dieterich's groundbreaking ideas, provides significant material for the study of ancient letter mysticism and emphasizes that this—like writing in general—must be traced back to the Orient. The first known cases of so-called "gematria," letter weighing, a type of alphabet magic with which we shall become thoroughly acquainted below, have been discovered by researchers on Babylonian bricks from the eighth century BCE. However, according to Dornseiff, the use of "number letters" in the true sense is a specifically Greek invention. It would be interesting to investigate whether the Egyptians, whose alphabet ultimately consisted of 24 consonant signs, already used them esoterically. Early on, the Pythagoreans in particular were interested in speculating about the numerical values of different words, and it was not until much later that Jewish rabbis began to ponder the mysticism of the alphabet, which, as is well known, plays an important role in Kabbalah magic. In the so-called ABC memorials, Dornseiff sees a remnant of a still semi-primitive time, protective measures against demons, the evil eye (Italian: *iettatura*) and the like. Remarkably, however, he has made no attempt to find the numerical values of these inscriptions and thereby trace their actual magical meaning. I will therefore begin this study by attempting to do so. For obvious reasons, I cannot

hope to provide a definitive and exhaustive interpretation of the entire material. I can only venture to assume that my examination of this aspect of the problem will bring us one step closer to a solution of the meaning of these mysterious inscriptions that may be possible for a later generation.

Since my primary aim is to arrive at an understanding of the basic principles of late antique alphabet mysticism, which may have been the model for runic magic, I will largely leave aside all inscriptions in archaic and provincial Greek and Italic alphabets. These inscriptions can probably be interpreted in accordance with principles similar to those I will use below. Attempting to determine the numerical values of these magical inscriptions would take me too far afield. Moreover, they are only of indirect significance for understanding runic magic, which must be placed primarily in the context of the alphabet mysticism of the later imperial period.

2. For the ancient Greeks, letters were, as mentioned above, also numerical symbols. The most common system in use was the so-called Milesian system, which began to spread throughout the Hellenic world in the eighth century BC from the coastal city of Miletus. from the coastal city of Miletus. Cf. Larfeld, Griechische Epigraphik[3] (1914), p. 294 ff. — The sign system can be found in any detailed Greek grammar. However, the Greeks also used the 24 letters α—ω as symbols for 1—24, as is the case, for example, in the designation of the songs of the Iliad and the Odyssey. When examining the clearly magical, alphabetically arranged Greek inscriptions, it is therefore difficult to dismiss the idea that Perhaps the alphabet was included in these inscriptions to a greater or lesser extent in order to give the

written word a different and more magical numerical value than that which the conventional system of notation used in trade and commerce was considered capable of providing. That the system α—ω = 1—24 was of greater mystical significance and was therefore used by the Pythagoreans is an opinion expressed by Wolfgang Schultz in his essay ΠΥΘΑΓΟΡΑΣ (Arch. f. Gesch. d. Philos. 21). a. used by the Pythagoreans, is a view put forward by Wolfgang Schultz in his essay *ΠΥΘΑΓΟΡΑΣ* (Arch. f. Gesch. d. Philos. 21, p. 248) and further developed by Robert Eisler in "Weltenmantel und Himmelszelt," see ibid., pp. 334 ff. and p. 767. Cf. also Carl Robert, Hermes 18, p. 466 ff. .

According to Dieterich (Rh. Museum 56, p. 84 = Kleine Schriften, p. 209), the following sequences of the Greek alphabet are found among the alphabetical mystical inscriptions:

1) *A - Γ* which, according to the key α — ω = 1—24, gives the numerical value 1 + 2 + 3 = 6; 2) *A — E* = 1 + 2 + 3 + 4 + 5 = 15; 3) *A — Z* = 1 + 2 + 3 + 4 + 5 + 6 = 21; 4) *A — K* = 1 + 2 ..... +10 = 55; 6) *A — M* = 1 + 2 ..... +12 = 78; 7) *A — N* = 1 + 2 ..... +13 = 91.

All of these numerical values now turn out to be multiples of lower numbers: 6 = 2 x 3 (which is probably insignificant, since the number is so low); 15 = 3 x 5; 21 = 3 x 7; 55 = 11 x 5; 78 = 6 x 13; 91 = 7 x 13. However, let us not dwell on this observation, interesting though it may be. We can go one step further and ask: what do the numbers 1−7 symbolize? Here, the literature on late antique mysticism provides an answer: in the numbers 1, 2, 3, 4, 5, 6, and 7, the names of the gods that were part of the names of the days of the week at that time had their numerical symbols. The number 1 was the sacred number of Helios and

Apollo (cf. Dieterich, Abraxas, p. 47), 4 was the sacred number of Hermes (Mercury). On the fourth day of the month, incense, honey, figs, lambs, pigs, etc. were sacrificed to him (cf. Roscher, Ausf. Lexikon der griech. und röm. Mythologie 1, p. 2361). (cf. Preller, Griech. Mythologie 1, p. 391), and the number 6 was sacred to Aphrodite (Venus): *venerius* was, as is well known, the highest roll of the dice among the Romans, originally probably a series of sixes, later a certain sequence of dice rolls ending with a six (cf. Plutarch: Cato minor 6, Propertius: Eleg. 4, 8, 45, Horace: Carm. 2, 7, 25, Suetonius: Augustus 71; on dice games in late antiquity, cf. Marquardt: Das Privatleben der Römer 2, p. 827 ff.). We thus obtain the following correspondences between god names and numbers:

Helios—Apollo (god of Sunday) = 1;

Artemis—Diana (goddess of Monday) = 2;

Ares—Mars (cf. *dies Martis*) = 3;

Hermes—Mercury (: *dies Mercurii*) = 4;

Zeus—Jupiter (: *dies Jovis*) = 5;

Aphrodite—Venus (: *dies Veneris*) = 6;

Kronos—Saturn (: *dies Saturni*) = 7.

It would undoubtedly not be difficult to find further evidence that the Greek and Roman gods in late antiquity were assigned numerical symbols in accordance with the order of the days of the week dedicated to them. Saturn, for example, is mentioned as "the first and the seventh" in one of the apocryphal Christian writings (cf. Hennecke, Neutestamentliche Apokryphen2, p.

433). in one of the apocryphal Christian writings as "the first and the seventh" (cf. Hennecke, Neutestamentliche Apokryphen[2], p. 433). However, the references I have given above should suffice for my purpose, and hopefully the following investigation will provide further support for the table above.

3. Let us now turn to the individual inscriptions and examine whether, at least in some cases, the nature of the object bearing a particular inscription, or one or more accompanying linguistically clear sentences, or some other circumstance, allows us to conclude that the particular deity whose numerical symbol is included in the gematic sum of the alphabetical inscription really has any significance in relation to what may have been the purpose of the magical operation.

1. In the museum in Naples there is a small terracotta figure found in Pompeii, a bald little old man, which clearly served as a lamp: "*il suo fallo serve come becco della lucerna*". The old man is holding a scroll in his hand, on which is written: *ΑΒΓΔΕΖ* (cf. Rh. Museum 56, p. 83 = Kleine Schriften, p. 208, and Dornseiff, p. 167). The alphabetical value of the inscription is: 1 + 2 + 3 + 4 + 5 + 6 = 21, i.e. 3 x 7. We thus find here a multiple of the number of Kronos-Saturnus: 7. The lamp may have served the same purpose as the clay pot discussed by Magnus Olsen with the inscription "*Artus fututor*" (see below under item 6). This is supported by unambiguous anatomical circumstances (the information given in Italian cannot easily be misinterpreted). Readers familiar with ancient mythology will have no difficulty in recognizing that Kronos (Saturn) is precisely the deity invoked to bring about a fateful influence on manhood: one need only

recall the operative intervention that Kronos performed on his own father.

2. On a Panathenaic amphora in Würzburg (see Dornseiff, p. 159), the inscription *ΑΒΓ* appears on the neck of the vessel and *Α —Θ* on the goddess's shield. The numerical value of the first row of letters is **6** (= 1 + 2 + 3); that of the second is 36 (= 1 + 2 .... + 8), i.e. a multiple of **6** (6 x 6). However, this does not refer to Aphrodite, but clearly to Pallas Athena. On magical amulets, where symbolic images of the deities of the seven days of the week are placed around an eye, a thunderbolt for Zeus, a lion for Helios, a hind for Artemis, etc., the deity of Friday is represented by an owl, the symbol of Athena. See Elworthy, The Evil Eye, p. 131 (fig. 19, depicted here as fig. 1) and p. 132: "The owl, however, was sacred to Athena or Minerva, and must have been substituted as the symbol of *dies Veneris*." In late antique magic, Athena's sacred number was thus the same as Aphrodite's, both having the sixth day consecrated to them.

6 x 4) multiplied by 300 (**6** x 50) = 7200 = **6** x 1200 (= **6** x 200). The inscription dates from around 300 BC, i.e. from the very first years of the Hellenistic period (cf. Dornseiff, p. 161).

4. Another example of the letter value 6 referring to Aphrodite is perhaps the inscription *ΑΒΓ* on a Berenice pillar from Pagasai in the Volos Museum in Thessaly, see Dornseiff, p. 162. The numerical value of *ΑΒΓ* (1 + 2 + 3) is 6, the numerical symbol of the female deities, cf. above, point 2. *ΑΒΓ* forms a separate line below a longer, defective row of letters.

5. On a marble tablet from a columbarium in Rome (cf. Dornseiff, p. 163), the Latin alphabet is repeated four times on

each side, with the last letter *Z* written three times. As this is an inscription in a burial chamber, a magical invocation of Hermes-Mercurius can be assumed. Hermes' number is 4, and the alphabet is also repeated four times on each side.

6. A vessel from Maar near Trier (cf. Dornseiff, p. 160) has the following inscription at its base: First the letters *ABC* placed upside down, "die Buchstaben *ABC* auf dem Kopf stehend," says Dornseiff, p. 160; Dieterich, Rh. Museum, 56, p. 81 = Kleine Schriften, p. 206, on the other hand, expresses himself in a way that suggests that the entire alphabet was engraved. Furthermore, the words: *Artus fututor* and in the line below: *Art ligo Dercomogni fututor*. Regarding the verb 'to bind' (*ligo*) in magical language, cf. e.g. Westermarck, Ur sedernas historia, p. 136 ff.. Then, in another hand, *Aprilis* and some incomprehensible signs are engraved. Because of the word *fututor*, it has been reasonably assumed that this must be a case of "defixion magic." Two adversaries probably wanted to destroy the erotic potency of Artus Dercomogni's son through a magical operation. There is much to suggest that we are dealing here with a typical magical inscription. The fact that the vessel was buried in a cemetery is consistent with necromantic practice. Cf. Cumont, Die orient. Rel. im röm. Heidentum, p. 220. As with the terracotta figure found in Pompeii (cf. above under item 1), this is an attempt to destroy a person's virility. The magic is therefore intended to win Saturn's favor. If we now add up the gematric numbers in the Latin inscription according to the principle $a = 1$, $z = 23$, we find: *Artus* = 75 (1 + 17 + 19 + 20 + 18); *fututor* = 115 (6 + 20 + 19 + 20 + 19 + 14 + 17); *Art ligo* = 78 (1 + 17 + 19 + 11 + 9 + 7 + 14); *Dercomogni* = 98 (4 + 5 + 17 + 3 + 14 + 12 + 14 + 7 + 13 + 9); *fututor* (cf. above) = 115; *Aprilis* = 80 (1 + 15 + 17 + 9 + 11 + 9 +

18). The sum of these is 561 (75 + 115 + 78 + 98 + 115 + 80). Adding to this the numerical value of *abc* (1 + 2 + 3) = 6, the magical numerical value of the entire inscription is 567 = 81 x 7, the number of Saturn, the destroyer of manhood. The number 81 should also be attributed magical significance, 81 = 9 x 9, and 9 is, as we shall see below, the number of compulsion and necessity. The fact that the inscription begins with the letters *abc* turned upside down is a circumstance which, when viewed in connection with the rest, has a perfectly natural explanation: the divine power that had to be neutralized was Venus — therefore the letters whose sum gives her sacred number 6 were turned upside down. Magnus Olsen, Om Troldruner, p. 14. Magnus Olsen also compares the upside-down opening of the inscription with the "stur runes" in Nordic inscriptions. has observed that the line *Artus fututor* has 12 letters and the next, *Art ligo Dercomogni fututor*, has 24 (12 + 12). This may not be a coincidence: the number of letters contains the number of Venus twice in one case and four times in the other. It should be added, however, that Hülsen, Röm. Mitt. = Mitt. des K. D. Arch. Inst., Röm. Abt., 18, p. 83, wanted to read *festo* instead of *Aprilis*, an addition that Dornseiff did not mention. In that case, the numerical value is increased by 6 + 5 + 18 + 19 + 14 = 62. The letters placed in the correct position can then be regarded as a uniform group: 561 + 62 = 623 = 89 × 7. If, instead of *ABC*, the entire Latin alphabet were engraved, the numerical value would be 276 = 46 × 6.

7. The following example does not appear as an inscription but can be found in a manuscript in Vienna, Catal. codd. astrol. graec. VI (cf. Dornseiff, p. 70). The Greek text says: "If you want to remain unharmed in war, fast for three days. Then write your

name, your father's name, and your mother's name *μετὰ τῆς αβ* with the blood of a spotless white dove (and Michael) on a natural papyrus leaf (*ἐν χάρτῃ ἀγενήτῳ*) and carry it with you when you go to war, unblemished." Here, *μετὰ τῆς αβ* has been interpreted as "together with the alphabet." I see a completely different solution to this detail in the mystical prescription: one must write *αβ*, because $α + β = 1 + 2 = 3$, the sacred number of the god of war, Ares. Note that one must fast for three days and write the names of three closely related people. Furthermore, the Greek word for dove, *περιστερά*, has $9 = 3 \times 3$ letters, and the dove was sacred to Aphrodite, whose sacred number was $6 = 2 \times 3$. Finally, Michael is the archangel of battle, and *Μιχαήλ* has $6 = 2 \times 3$ letters. However, the addition about Michael was probably made at a later date. Some of these pointed out 3-number relationships could be coincidences. However, anyone familiar with the psychology of the time has no reason to suppose that such things escaped the attention of the magical recipe writer.

8. On p. 58, note 2, Dornseiff mentions a magic square preserved in a papyrus, intended to serve as an instrument for a curse. Along the sides and across the middle section are five rows of Greek letters.**13,** which probably also have magical significance. Analogies to this can be found in certain runic inscriptions (e.g., the curse on the loom in Lund, cf. § 65, 2). It is also likely significant that the sum of the total number of letters (553) is 7 taken 79 times, the latter number being a prime number. The Saturn number is thus freed from the influence of other magical numbers, as the large number can only be divided evenly by 7 or 1. Analogies can be found, as Chapter 4 will show, in numerous magical runic inscriptions.

9. In his interesting work "Sethianische Verfluchungstafeln*KEKEB*, whose numerical value is 32 (10 + 5 + 10 + 5 + 2). At the bottom (left) are the following four lines: *ΚΕΡΝΦ, ΦΚΟΚ; ΡΚΕ; ΝΦ.* The numerical value of the first line is 66 (10 + 5 + 17 + 13 + 21); the second line 56 (21 + 10 + 15 + 10), the third and fourth lines 66 (17 + 10 + 5 + 13 + 21); the numerical value of the entire group is thus 188 (66 + 56 + 66). On the costume worn by the demon-like creature, three lines can be read: *ΕΚΒΦΝΕ; ΣΦΚΕΡΕ; ΣΚΕΦΑΕΝΦ,* The numerical value of the first line is 56 (5 + 10 + 2 + 21 + 13 + 5); the second row is 76 (18 + 21 + 10 + 5 + 17 + 5); the third row is 94 (18 + 10 + 5 + 21 + 1 + 5 + 13 + 21); the numerical value of the entire group is thus 226. On the demon-like creature is a combination of letters whose sum cannot be divided by any number higher than 1; 226 = 2 × 113 (which is a prime number). If we calculate the total numerical value of the entire inscription, we get 32 + 188 + 226 = 446. This is also a number that cannot be evenly divided by any number higher than 2 (446 = 2 × 223, which is a prime number). The Sethian magic Cf. regarding the Sethian inscriptions, my essay "Der Ursprung der Runenschrift und die Magie" (The Origin of Runic Writing and Magic), Arkiv f. nord. filol. 43, new series 39, p. 97 ff. (p. 107—109)., which originate from Egypt, should not, like the usual Roman alphabet mysticism, have consisted of single-digit symbolism based on the order of the late antique Greek-Roman gods of the weekdays. Here we must assume a magical number system closely related to Near Eastern magic. In this system, 2 is the number of the demonic. As will be shown later (cf. chap. 2, § 16), runic magic has adopted this numerical symbol from the mystery religions of the Near East: 2 is the number of the rune turs ᚦ. The Sethian lead tablet, on

which both the central inscription and the inscription as a whole show numerical values based on the number 2, was therefore probably made to win the favor of a demonic power. Like the previous inscription, this one also consists of a series of letters, the sum of which includes the number 13 as a factor. The characters are 39 = 3 × 13 (exactly the same number as the characters in the curse inscription on the weaving shuttle in Lund, cf. § 65, 2).

10. Finally, we have cases where, in Hellenistic times, the entire alphabet was engraved for magical purposes. How can this be explained? I believe that the greater magical power of the Greek alphabet compared to the Latin alphabet is due to the fact that its gematric total is equal to 300, a number that contains all the sacred numbers of the week gods except 7, the number of the evil Kronos: 300 = 1 × 300; 2 × 150; 3 × 100; 4 × 75; 5 × 60; 6 × 50.

4. In the following cases, due to the lack of any indication of the relationship between the objects bearing the inscriptions and ancient mythology, no argument can be made that this or that deity is meant. However, it is interesting to note that the inscriptions discussed above (§ 3) are by no means the only ones that display a gematric numerical value consisting of multiples of the numbers 3–7. Perhaps future research in one or more of these cases will succeed in bringing to light circumstances that will enable a more definite conclusion to be drawn about the magical purpose of these inscriptions.

1. On the lid of a vase found at Adria (cf. Dornseiff, p. 159) is the alphabetical row α—ν with two inversions in the customary order of the characters. The gematric value of α—ν

(see § 2 above) is 91 = 13 × 7. This is probably a case of Saturn magic. As I know nothing about the possible decoration of the vase, I can only express a conjecture. Alternatively, however, an interpretation in accordance with the cases discussed below in § 5 is conceivable.

2. On a plate from the Saalburg praetorium (cf. Dornseiff, p. 161) is written in a semicircle: *ABCDE* (the last character is of an unusual type).

If one compares this inscription with the alphabet row on the Mainz vase mentioned by Dornseiff, p. 160, as no. 14, one finds that the letters *a—e* must be present here. The peculiar shape of the *e* sign is of some interest: two vertical strokes, as in the rune for *e* in the older runic alphabet. The alphabet on the Mainz vase (no. 14 in Dornseiff) also has an *f* sign with one of the crossbars pointing upwards (cf. the rune *fé*) and an *l* sign, which corresponds to the *l* rune in the word "*liano*" on the buckle from Charnav (see § 50). The sum of the letters *a—e* (1 + 2 + 3 + 4 + 5) is 15 = 3 × 5. It is possible that the god of war, Mars, has something to do with the inscription.

3. On a fragment of a white marble pillar found in the Temple of Apollo in Kalymna, there is an alphabetical sequence δ—ψ, in which η and ς have become illegible (cf. Dornseiff, p. 162). The numerical value of this is 270 (= 300 — 1 — 2 — 3 — 24) = 45 × 6. However, as this is a fragment, no assumptions can be made, and I can only record the case.

4. On a piece of marble from the Diocletian Baths there is a left-running alphabet with *K* and *Y* omitted (cf. Dornseiff, p. 162, where, however, there is no information about which

alphabet is meant, but reference is made to Hülsen, Rom. Mitt. 18 [1903], p. 81). The Roman alphabet without *k* and *y* gives a total of 244 (276—32) = 61 × 4 (Mercurius' number).

5. On a step in the "magasin des colonnes" on Delos is the row *A—E* and above it the row *A—N*. The numerical value of the former is 15 = 3 × 5, the latter 91 = 13 × 7. Here, Zeus (the god of the number 5) and Kronos (the god of the number 7) may possibly be referred to (cf. Dornseiff, p. 163).

6. On a white marble slab from Gjölde in Lydia, the Greek letters A—K appear twice, thus 55 (= 11 × 5) twice. The shape of the letters indicates the period around the first century (cf. Dornseiff, p. 163).

7. A late Roman inscription from Frascati-Tusculum (see Dornseiff, p. 163) contains the Greek letter sequence *A—M,* i.e. the numerical value 78 = 13 × 6 or 26 × 3, and the word *ΠONTΠ* (in another hand), numerical value 81 = 27 × 3 (the inscription probably refers symbolically to Mars, as 3 is also included in the numerical value of the previous letter group).

8. On a fragment of a marble tablet in the Antiquario communale in Rome (see Dornseiff, p. 163) is the letter sequence A—E = 15 = 3 × 5 (the number of Mars, combined with that of Jupiter, unless the interruption in the alphabet is due to the fragmentary nature of the object).

9. A fragment from Lambaese, found among the ruins of a Byzantine fortress (see Dornseiff, p. 164), has the following clearly magical inscription: aa bb cc dd gh kl nm

The numerical value of the first row is 20, that of the second row 61. This is followed by the mysterious words *rivirs fmim ep sib* with downward-pointing letters. Cf. Medic. Plinii I, 7, quoted in Heim, Incantamenta magica, Fleckeisens Jahrb. Suppl. 19 (1893), p. 556; Blau, Das altjüdische Zauberwesen, Strassburg 1898, p. 147. with numerical values of 90 + 39 + 20 + 29 = 178. Since the numerical value of the whole (81 + 178) is 259 = 37 × 7, there could possibly be a case of alphabet magic with the Saturn number. However, since we are dealing with a fragment, it is quite likely that *op* (=29) was written under *dd*. In that case, the numerical value of the whole would be 288 (259 + 29), which is = 12 × 24 (a number that often occurs in late antique alphabet magic and in runic magic, cf. above § 1). We can therefore only express certain alternative assumptions about this inscription. However, it is highly probable that this is a case of alphabetical magic.

10. On a brick from Saalburg (see Dornseiff, p. 166) we find the letters *a—e,* which have the numerical value 15 = 3 × 5.

5. I now come to a series of inscriptions in Dornseiff's "Corpus der ABC-Denkmäler," all of which have numerical values that are multiples of the number 13. In my opinion, they belong to a very special religious stratum within the late antique world. We are most likely dealing here with relics from the cult of Jupiter Dolichenus, which, as is well known, spread from one Roman army camp to another at about the same time as the Mithraic cult. Jupiter Dolichenus, whose prototype is probably the Hittite Teschub (cf. Reitzenstein, Das iranische Erlösungsmysterium, p. 7, note 1), is, by all accounts, identical with ὁ τρισκαιδέκατος θεός, the Lesser Asian god, as whose

incarnation Philip of Macedon and Alexander the Great, Emperor Hadrian, and probably once even Constantine the Great, had themselves honoredJfr Otto Weinreich, Lykische Zwölfgötter-Reliefs, p. 7 f. (Sitzungsb. der Heidelb. Ak. 4, Jahrg. 1913) and Triskaidekadische Studien, p. 11 ff. (Religionsg. Versuche 16, 1. Heft, 1916). In any case, there is no reason to doubt that the sacred number of Jupiter Dolichenus, worshipped in this camp, was 13 (see examples below):

1. At the Forum in Rome in the monastery of S. Francesca Romana (see Dornseiff, p. 164), an inscription has been found beginning with IOMD = *Jovi Optimo Maximo Dolicheno*. This is followed by the Latin alphabet and the two rows *e—m* and *r—z*. The numerical value of IOMD is: 9 + 14 + 12 + 4 = 39, which is 3 × **13**. The numerical value of the letter sequence *e—m* is 68 and of *r—z* 140, and their sum, the number 208 (68 + 140), is = 16 × **13.**

2. On a brick from the Dolichenus temple in Carnuntum (cf. Dornseiff, p. 166) is written: *opqrsxyz—abcd* and on the next line *ig,* followed by a stamp, and then *hiklm*. The numerical value of the first line is 146 (14 + 15 + 16 + 17 + 18 + 21 + 22 + 23) + 10 (1 + 2 + 3 + 4) = 156, which is = 12 × **13.** The numerical value of *ig* and *hiklm* in the next line is 66 (16 + 50), but the stamp probably also had a numerical value.

3. In the same camp (Carnuntum, see Dornseiff, p. 167), graffiti has also been found with the Latin letters *A—R*, with *K* omitted. The numerical value of this combination of letters is

153 jⲠ ^i8 = 3^j _ ιо (the numerical value of *k*) = 143, which is 11 **13.**

4. On a stone found in Trier (also known to be an old Roman military camp), which is believed to have been used as a game piece (cf. Dornseiff, p. 167), the letter sequence *a—m* can be read, whose numerical value is 12 × 13 / 2 = 156 / 2 = 78 = 6 × **13**.

5. On a brick from Holledoorn near Nijmegen (cf. Dornseiffs, p. 166), not far from the former Roman border, the letters *A—Y* can be read, whose numerical value is 22 × 23 /2 506 /2 = 253 = 11 × 23, and the row *A—N* = 91, which is = 7 × **13**. The former row, as a multiple of the number 23, is perhaps of some interest: several runic inscriptions, especially grave inscriptions, show multiples of this number, as we shall see later.

6. On a marble tablet found in Verona, an important military town in the days of the Roman Empire, next to another, almost obliterated inscription (see Dornseiff, p. 164), stands the group of letters: DCBA EFGH NMLI OPQR Thus, as in the inscription discussed in section 3, the sequence of letters *A—R* without *K.* The numerical value is thus = 143 = 11 × **13**.

7. In § 4, 1 above, I have discussed a case where Dolichenus magic may be present. In § 8, I will present a series of magical Dolichenus inscriptions that contain gematria with the number 13 without being of an alphabetical nature.

6. Among the examples in Dornseiff's "Corpus der ABC-Denkmäler" there are quite a few that can be classified with certainty or with a high degree of probability as Christian. These must be treated in a separate group, preferably those that exhibit a numerological system that must be interpreted in a way that is largely different from that of the pagan inscriptions.

1. The neck of a terracotta vessel found in a burial site in Carthage (cf. Dornseiff, p. 161) bears a cross, the image of two fish, and the letters *ABC*. In these I see a symbol of the Trinity: *A* = 1 = the Father, *B* = 2 = the Son, *C* = 3 = the Holy Spirit (cf. § 8, 5, where the numbers 1 and 2 unambiguously have these meanings).

2. On the stone slab of a boy's grave in the Cimitero Ostriano in Rome (see Dornseiff, p. 165) are the Greek letters *ΑΒΓ*. The inscription should probably be interpreted in the same way as the previous example.

3. In Naples (cf. Dornseiff, p. 162 f.), the following inscription has been found:

αβγδεζηθικλμνξ οπρστυφχψω κελεύσαντος τοῦ θεοῦ

Thus, first the Greek alphabet, arranged so that 14 letters appear in one row and only 10 in the next, followed by a sentence referring to a deity. The gematric sum of the first row is $(14 × 15)/2 = 210/2 = 105 = 35 × \mathbf{3}$, of the second row 195 (= 300 - 105) = $65 × \mathbf{3}$, of the third 237 (10 + 5 + 11 + 5 + 20 + 18 + 1 + 1 3 + 19 + 15 + 18 + 19 + 15 + 20 + 8 + 5 + 15 + 20) = $79 × \mathbf{3}$. There is clearly a deliberate gematric arrangement of letters here. The magic is most likely Christian, cf. Revelation 1:8: *Ἐγώ εἰμι τὸ ἄλφα καὶ τὸ ὦ, λέγει κύριος ὁ θεός, ὁ ὢν καὶ ὁ ἦν καὶ ὁ ἐρχόμενος.*

4. In a fresco from the Simeon Monastery at Aswan (cf. Dornseiff, p. 168), Christ is depicted surrounded by four winged figures (clearly the four *ζῷα* around God's throne) and 24 other figures, designated by the Greek letters *ααηλ, βαηλ, γαηλ*, etc. up to *ωαηλ*. The gematric sum of all these names, obviously

formed in analogy with the names of the angels *Michael, Raphael,* etc., is 300 (α—ω) + 24 × 19 ($\alpha\eta\lambda$ = 1 + 7 + 11) = 300 + 456 = 756 = 9 × 7 × 12. Thus, the numbers 7 and 12, which are particularly sacred in astral religion, are combined with 9, the number of wonder in Christian mysticism.

5. In the catacombs of Saint Christina of Bolsena, an inscription has been found (cf. Dornseiff, p. 168) that looks like this: *abcde* twice) + 59 (*gkflmn*) + 37 (*pax*) + 22 (*ax*) + 37 (*ts*). This is **5** × 37. What is remarkable is that the numerical value of the Latin word *pax,* which is part of the inscription, is 37 (15 + 1 + 21), i.e. the same number that appears five times in the total sum of 185. Five was a sacred number in Christian mysticism: Jesus had five wounds. Through the five crosses and a gematric total sum of 185 = 5 × 37 (*pax*), the intention was probably to say: "the crucified one gives peace." An alphabetical mystery is perhaps also that 23 letters were used. The number 23, as we shall see later, is significant in Nordic grave inscriptions with runes. Perhaps 23 letters were chosen here to correspond to the number of letters in the Latin alphabet. The arrangement of the letters on the table-like rectangles probably symbolizes something. There are 11 letters placed on the first one. Possibly = 12 apostles — 1 (Judas)?

7. With the above examples of Christian alphabet mysticism in late antiquity in mind, one must ask the question: are there perhaps already some cases of the same mysterious use of the numerical values of letters in some of the books of the New Testament? The texts that are most likely to conceal such gematria are the Book of Revelation and the Gospel of John, of which the former is known to be of a distinctly numerological

nature. See my article "Kristen bokstavsmystik" (Christian letter mysticism) in Sydsvenska Dagbladet (Sydsvenskans revy, Jan. 9, 1927) and a previous article in the same newspaper, "Vilddjurets talgåta" (The riddle of the wild beast) (Jan. 24, 1926). 1927) and a previous article in the same newspaper, "Vilddjurets talgåta" (The Beast's Number Riddle, Jan. 24, 1926).

1. First, we must examine the beast's number riddle in the Book of Revelation. "And I saw a beast rising out of the sea, and it had ten horns and seven heads, and on its horns ten diadems, and on its heads blasphemous names" — thus begins the thirteenth chapter of the Book of Revelation, the part of the Christian apocalypse that scholars and laymen alike have pondered for nearly two millennia. And yet the apocalyptic author has given the people of his time, who were initiated into the mystery of letters, a key to solving the riddle: "Here is wisdom. Let him who has understanding calculate the number of the beast... And its number is six hundred and sixty-six" (Revelation 13:18). This can hardly mean anything other than that when calculating the numerical value of a certain name, one should arrive at the number indicated in the text. Before we tackle the numerical riddle itself, however, we must first establish the original wording of the text. It appears in two variants, one with the number 666, the other with the number 616. The manuscripts belonging to the Eastern Roman Empire show the number 666, but outside the Hellenic world, in Western Europe and Armenia, texts of the Apocalypse have been found which instead mention the number 616. John 2, p. 320, texts of the Apocalypse have been found which instead mention the number 616. If, for some reason in the Hellenistic environment, 666 came to stand for 616, the new number easily supplanted the

original because of its stronger symbolic meaning: it is the sum of all numbers from 1 to 36, and 36 is the sum of the numbers 1 to 8, the magical ogdoad. The fact that the name Jesus in Greek script according to the standard Milesian system has the numerical value 888 (= Ἰησοῦς) may also have played a role: the numbers 666 and 888 formed suggestive counterparts through correspondence in their structure. The late Hellenistic world of thought, with its strong focus on numerology, may therefore have preferred a distortion of the original text. There are thus strong reasons to believe that the original text had the number 616. However, this number is so high that at first glance only the Milesian system of counting seems to have been used. The proposed interpretation *Καῖσαρ ϑεός* = 616 (20 + 1 + 10 + 200 + 1 + 100 + 9 + 5 + 70 + 200) also provides a fairly good solution to the numerical puzzle according to the Miletus system. Cf. Deissmann, Licht vom Osten[4], p. 238, note 3. Independently of Deissmann, I have arrived at this interpretation after studying Heinen, Zur Begründung des römischen Kaiserkultes, Klio 11 (cf. Sydsvenska Dagbladet, Jan. 24, 1926). However, considering that the apocalyptic writer was a man initiated into the mystical knowledge of his time, especially astrological speculation (cf. Boll, Aus der Offenbarung Johannis (*ΣΤΟΠΧΕΙΑ* 1)), one must certainly be skeptical about the assumption that he would have completely abandoned the truly literal mystical method of calculation and adhered only to the Milesian system commonly used in commerce and everyday life. A solution to the riddle of numbers using a strictly alphabetical mystical method may well have been what he actually intended, even though he arranged the matter in such a way that a solution using the Milesian system could be arrived at. The text says, if we follow the original

word for word: "Here is wisdom (Ὦδε ἡ σοφία ἐστίν); he who has understanding, let him calculate the number of the wild beast (ὁ ἔχων νοῦν ψηφισάτω τὸν ἀριθμὸν τοῦ θηρίου), for it is the number of man (ἀριθμὸς γὰρ ἀνθρώπου ἐστίν). And its number is..." This can be understood to mean that the number of the beast should be calculated based on the number in the Greek word ἄνθρωπος (human), and that a number of this number (a multiple) is 616. Now, according to the alphabetical magic calculation principle, the numerical value of ἄνθρωπος is 112 (= 1 + 13 + 8 + 17 + 24 + 16 + 15 + 18). The problem can be formulated arithmetically as follows: find the number that is included in 112 and 616! Answer: 56, because 2 × 56 = 112 and 11 × 56 = 616. This is the number of the beast, and the name in which it is contained (τὸ ὄνομα τοῦ θηρίου) is Καῖσαρ: κ = 10, α = 1, ι = 9, σ = 18, α = 1, ρ = 17, giving a total of 56. The beast may be a symbol of 11 Roman emperors (Augustus to Domitian), its number therefore also became 616 = 11 × 56 (eleven emperors). The seven heads of the beast could symbolize seven real rulers, the ten diadems ten men who bore the imperial name—the three temporary rulers of the interregnum (Galba, Otho, Vitellius) should be included in this case. One of the seven heads, however, will rise as the eighth (Nero-Domitian?), and the apocalyptic writer would thus have imagined the fall of the Roman world empire with its eleventh emperor. One head will be given new life, i.e. v. s. an eleventh emperor (Domitian) is thought to be a reincarnation of a previous one (Nero), cf. 10 + 1 rulers in the Book of Daniel, chap. 7, 24. This chapter is considered to be the model for chapter 13 of the Apocalypse. Perhaps a further analysis of the number 616 can give us a more definite answer to the question? The number 616 may in itself

conceal the sum of the numerical values of a series of emperor names. In the seventeenth chapter of the Book of Revelation, verses 9 ff., we find a suggestive explanation: "The seven heads are seven mountains on which the woman sits. They are also seven kings; five have fallen, one is, and the other has not yet come, and when he comes, he must remain for a little while. And the beast that was and is not, is himself the eighth, and yet one of the seven." The 'eighth,' who is also one of the seven, is undoubtedly Nero redivivus. But who are the other six? If we start with Augustus, Otho would be the seventh of seven successive emperors. But knowing the name of this emperor before his accession to the throne was impossible, and if the prophecy had been written down after he had seized power in Rome, the entire prediction would have been so quickly overturned that the apocalyptic writer would probably have refrained from distributing his work, which was certainly not written in a single sitting: Otho, who became emperor in January of the year 69, took his own life in April of the same year; after that came Vitellius, who was also soon overthrown, not the great beast. If we disregard the three ephemeral interregnum emperors and list the emperors: Augustus, Tiberius, Caligula, Claudius, Nero, Vespasian, and Titus, there is no way (despite the many variations of Caligula's name: *Γάϊος* and *Καλιγόλας* with a multitude of spellings) no way to derive the numerical value 616 from the names of these seven emperors. However, there remains a third possible interpretation: the seven heads with lion's mouths could symbolize seven emperors who were hostile enemies of the Jewish Christians and the land that was sacred to them. A truly serious change of arms between the Roman Empire and Judea did not occur until the uprising under Nero.

Then, as is well known, the struggle continued under Galba, Otho, Vitellius, and Vespasian, until the heir to the throne, Titus, captured and destroyed the holy city; cf. Rev. 13:6: "And it was given power to make war against the saints and to overcome them." Thus, they had experienced six angry enemies and could fear a seventh in Domitian. Five had fallen (Nero, Galba, Otho, Vitellius, Vespasian), one (Titus) was emperor, and a seventh was next in line to become emperor (cf. the Bible quotation on p. 19). That this one would bear the name Domitian could be predicted with considerable certainty. In this particular case, there was undoubtedly a suitable time to make an imperial prophecy with the best chance of coming true. If we now calculate the total numerical value of these seven, the fact that Nero is to return to rule as the eighth does not add any new name to the beast. The entire Apocalypse is, moreover, filled with numerical mysticism involving the names of seven emperors, yielding the number 616 as the final sum if the names are rendered in writing as follows: *Νέρων* = 72 (13 + 5 + 17 + 24 + 13); *Γάλβας* = 36 (3 + 1 + 11 + 2 + 1 + 18); *Ὄθων* Alternatively, it can be read as *Ὤθων* = 69 and *Δομετιανός* = 111. = 60 (15 + 8 + 24 + 13); *Βιτέλλιος* = 99 (2 + 9 + 19 + 5 + 11 + 11 + 9 ++ 15 + 18); *Οὐεσπασιανός* = 149 (15 + 20 + 5 + 18 + 16 + 1 + 18 + 9 + 1 + 13 + 15 + 18); *Τίτος* = 80 (19 + 9 + 19 + 15 + 18); *Δωμετιανός*See note 2, p. 20. = 120 (4 + 24 + 12 + 5 + 19 + 9 + 1 + 13 + 15 + 18) — the sum of the seven numbers (72 + 36 + 60 + 99 + 149 + 80 + 120) is thus = **616.** The normal form of Domitian's Greek name is *Δομετιανός* (not *Δομιτιανός,* which even in official inscriptions seems to be in the minority). Cf. Pape, Wörterhuch der griechischen Eigennamen[3], p. 318, and in the indexes to Cagnat, Inscriptiones Graecae 1 and 3 (part 2 is not yet complete). Sporadically found

in inscriptions ω instead of *o* in the first syllable (e.g. inscription 1287 in Cagnat, Inscriptiones Graecae 1, where the name is spelled this way twice). Here and there in Greek inscriptions from the period 80-200 AD, one encounters ω, representing the short Latin *o*, e.g. *Κὼμμοδος* (inscription no. 350 in part 3 of the above). In the cases I have seen, it is an *o* at the beginning of a syllable that is stressed or far from the accent (and may therefore have had a bitone, as in *Dòmetianós*). At the time when, according to the above calculation, the Apocalypse must reasonably have been written (around the year 80), Domitian had not yet succeeded his brother. He is mentioned only in one or two inscriptions alongside him. It would therefore be understandable if the author of the Book of Revelation had chosen a form of the name that he might have avoided a decade later. However, we need not commit ourselves to this hypothesis. It is quite possible that he counted *Δομετιανός* = 111, but instead used an ω in the first syllable of *Ὄδων*. This regent name is found in very few inscriptions: Cagnat has only one in the above-mentioned work (the bearer of the name was emperor for only about three months). It would therefore be entirely natural if the apocalyptic writer had to rely entirely on the common pronunciation of this name, which may well have been *Ὦδων* (possibly with a folk etymological connection to the verb *ὠθέω* 'to oust': Otho ousted Galba). In any case, the form is by no means more unreasonable than *Κὼμμοδος* etc. Otho's short reign may simply have been the reason why an ω form was not also used for his name. The Latin *Vitellius* is certainly rendered, judging by Pape's dictionary, in most preserved examples as *Οὐιτέλλιος* (almost all examples are taken from translations of historical Latin works or from Greek historians who must have

known Latin). However, we have at least five examples of the spelling *Βιτέλλιος*, some of which are quite old. From around the beginning of the 1st century AD, the Attic *β*, not *ου*, is also found for the Latin *v* (cf. Brugmann, Griech. Gramm.[4], p. 128). It is likely that the sound written with the Greek *β* in the first century AD in the Asia Minor language area replaced the Latin *v* in common pronunciation. It is therefore not unreasonable to assume that the apocalyptic writer, as far as he was able, adhered to what he found in writing to be the normal forms of names, but used a spelling based on the vulgar pronunciation of his time in the case of the names of two ephemeral emperors, which he had probably only seen written on rare occasions, if ever. It therefore seems most likely to me that in his gematric calculation he used *Ὦδων* = 69 and *Δομετιανός.* = 111. The numerical value of the latter name finally gives us a possibility of explaining the origin of the number 666. The change may be due to the fact that during Domitian's persecution, people wanted to see the Antichrist in this emperor and sought to find his name in the number 666, which arose through numerical speculation or perhaps a temporary clerical error in a single manuscript copy. Now, from a mystical point of view, the number 111 is hidden in the number 666, since this is equal to 6 × 111. Just as in *ἄνϑωπος* = 112, one could find the word *Καῖσαρ* = 56 by breaking down the key word into 2 × 56, a corresponding analysis has yielded *Δομετιανός* = 4 + 15 + 12 + 5 + 19 + 9 + 1 + 13 + 1 5 + 18 = 111 from the number 666. This means that the original correspondence between *ἄνϑρωπος* (= 2 × 56) and the following number (616 = 11 × 56) has been lost, as has the correspondence with the number 616 hidden in a sentence in the seventeenth chapter (cf. point 3 below). However, the reading

666 could easily have supplanted 616 due to the topicality of the associated interpretation in a turbulent period at the end of the first century. After Domitian's death, it was not possible to return to the original reading, and the numerological apparatus fell into oblivion.

2. However, the case of gematria just discussed is not isolated in the Apocalypse. There are at least two other very clear parallels. In the 21st chapter of the Book of Revelation, there is mention of the New Jerusalem descending from heaven. It is said to have "a great and high wall" (verse 12), but further down (verse 17) its circumference is given as only 144 cubits. "The Apocalypse seems to lack all plastic imagination," exclaims Bousset in Die Offenbarung Johannis, p. 514 (1st edition, 1896). However, if we examine the passage more closely, we find a significant addition: *μέτρον ἀνϑρώπου, ὅ ἐστιν ἀγγέλου* — d. v. s. 144 cubits, measured by the measure indicated in the word *ἄνϑρωπος;* (man) and which is also found in the word *ἄγγελος* (angel): "The measure of man which is angel" (in a literal interpretation). As I have shown above, the alphabetical mystical numerical value of the former word is 112, while the numerical value of *ἄγγελος* is: 1 + 3 + 3 + 5 + 11 + 15 + 18 = 56. Since 112 = 2 × 56, 56 is clearly the number that must be combined with 144. The circumference of the wall is then 144 × 56 = 8064 cubits, a measurement which is certainly considerably less than the circumference of the wall of Jerusalem immediately before the destruction of the city, 6000 meters according to Josephus, but nevertheless a measurement which in reality should come quite close to the circumference of the city wall in Solomon's time. Herod Agrippa I, as is well known, had the walls of Jerusalem considerably enlarged. Cf. Benzinger, Hebräische

Archäologie[2], p. 35 ff.; George Adam Smith, Jerusalem 1, book 1, chap. 8; Guthe, Kurzes Bibelwörterbuch, p. 807. The apocalyptic writer did not, incidentally, allow for any place for the temple in the New Jerusalem: "And I saw no temple in it, for the Lord God Almighty and the Lamb are its temple" (21:22). The fact that the numerical value of the emperor's name was included in the number of the new city walls certainly had symbolic significance. By destroying the old Jerusalem, the emperor had built the new one. We already know from Assyrian times that the name of the builder was indicated in the length of a city wall. King Sargon II (723–705 BC) had the city of Khorsabad built with walls 16,283 cubits long, a number equal to the sum of the numbers in his name (cf. Dornseiff, Das Alphabet, p. 91). The number 144 = 12 × 12 (the tribes of Israel) is clearly intended to triumph over 56, the number of the wild beast, within the number 8064. The statement in verse 16 that the city would be 12,000 stadia in length, width, and height is probably an interpolation from the Talmud. In Baba Bathra, 75b, it is written that the city would have precisely this height, cf. Charles, op. cit., p. 164. This does not correspond to the information about the circumference of the wall. Or else one may interpret the matter as meaning that the apocalyptic writer imagined the city resting on a cube of this immense size.

3. In the 17th chapter of Revelation, the apocalyptic writer describes how he saw in a vision a woman, the "whore of Babylon." "There I saw a woman sitting on a scarlet beast, full of blasphemous names, and it had seven heads and ten horns." This is clearly an allegory referring to the Roman Empire. The beast on which the woman sits is a symbol of imperial power. This is suggested by the scarlet color, the color of the imperial robe. The

horns and heads correspond to the description in the thirteenth chapter. The blasphemous names are formed from the imperial titles: they included names such as *θεὸς, θεοῦ υἱὸς, σεβαστὸς, σωτήρ* — "god, son of god, worshipped, savior"; thus, from a Christian point of view, a series of blasphemies. Cf. Heinen, Klio 11, p. 129 ff. The point of the allegory is thus clear enough. To be sure, the following hint is given to the initiated: *καὶ ἐπὶ τὸ μέτωπον αὐτῆς ὄνομα γεγραμμένον, μυστήριον, ΒΑΒΥΛΩΝ Η ΜΕΓΑΛΗ ΤΩΝ ΠΟΡΝΩΝ ΚΑΙ ΤΟΝ ΒΔΕΛΥΓΜΑΤΩΝ ΤΗΣ ΓΗΣ* — "and on her forehead [was] written a name with a secret meaning (= a mystery): Great Babylon, mother of harlots and abominations of the earth" (verse 5). Everything indicates that this is a letter puzzle. Let us therefore calculate the letter values of the twelve words, which in the Greek editions are usually rendered in capital letters. Cf. Charles, op. cit., p. 339; Nestle, Novum Testamentum Graece (Stuttgart 1906), p. 644; etc. (1.) *Βαβυλών* = 2 + 1 + 2 + 20 + 11 + 24 + 13 = 73; (2.) *ἡ* = 7; (3.) *μεγάλη* = 12 + 5 + 3 + 1 + 11 + 7 = 39; (4.) *ἡ* = 7; (5.) *μήτηρ* = 12 + 7 + 19 + 7 + 17 = 62; (6.) *τῶν* = 19 + 24 + 13 = 56; (7.) *πορνῶν* = 16 + 15 + 17 + 13 + 24 + 13 = 98; (8.) *καὶ* = 10 + 1 + 9 = 20; (9.) *τῶν* = 19 + 24 + 13 = 56; (10.) *βδελυγμάτων* = 2 + 4 + 5 + 11 + 20 + 3 + 12 + 1 + 19 + 24 + 13 = 114; (11.) *τῆς* = 19 + 7 + 18 = 44; (12.) *γῆς* = 3 + 7 + 18 = 28. The sum of 73 + 7 + 39 + 7 + 62 + 56 + 98 + 20 + 56 + 114 + 44 + 28 = 604. But this inscription was undoubtedly intended to be epigraphic in nature: around the woman's head, the apocalyptic writer imagined a band with an inscription running in a circle in large letters — between each word there should have been a separator, 12 in total. As will be shown below, in magical gematria (Greek-Roman as well as Old Norse), separators are assigned numerical

values: one dot (as on a die) is equal to 1, two dots are equal to 2, etc. We must therefore add 12 to the number 604, giving a result of **616.** The great number of the beast is 11 × 56 (= *καῖσαρ*). However, the numerical mysticism in this chapter does not end here. The description of the vision begins with the words: *καὶ εἶδον γυναῖκα* = "and I saw a woman" (17:3). The numerical value of the accusative form *γυναῖκα* is: 3 + 20 + 13 + 1 + 9 + 10 + 1 = 57. Those initiated in letter mysticism have thus been able to insert *καῖσαρα* = 10 + 1 + 9 + 18 + 1 + 17 + 1 = 57. The sentence "I saw a woman" could be replaced with "I saw an emperor." Verse 5 can finally be interpreted in yet another way, which provides a letter-mystical solution: *καὶ ἐπὶ τὸ μέτωπον αὐτῆς ὄνομα γεγραμμένον, μυστήριον* = "and on her forehead was written a name, a mystery," we calculate the letter value of *ὄνομα,* which is 15 + 13 + 15 + 12 + 1 = 56 = *καῖσαρ!*

4. The text among the New Testament writings that is recognized as being closest to the Book of Revelation is the Gospel of John. In any case, it was finalized by a person who belonged to a strongly mystical movement within Hellenistic Christianity. Cf. e.g. Eduard Meyer, Ursprung und Anfänge des Christentums 1, p. 311 ff. In the twenty-first chapter, which is in all likelihood an addition made by the publisher, there is an account of a meeting between the risen Jesus and his disciples, who were fishing in the Sea of Tiberias: "But that night they caught nothing. When morning came, Jesus stood there on the shore, but the disciples did not know that it was Jesus." He urges them to cast their nets, they obey his advice and catch such a large shoal of fish that they are unable to pull in their nets. John suspects that it is Jesus and reveals his thoughts to Peter. Peter runs into the lake and manages to pull up the nets. When the

fish are counted, there are "one hundred and fifty-three." None of the disciples dare to ask, "Who are you?" — "knowing that it is the Lord": *εἰδότες ὅτι ὁ κύριός ἐστιν*. Now, the mystical numerical value of *κύριος* = 89 (10 + 20 + 17 + 9 + 15 + 18) and of *ἐστιν* = 64 (5 + 18 + 19 + 9 + 13), together = 153. As is well known, in early Christian times the fish was a symbol of Jesus: the letters of the Greek word *ἰχθύς* (fish) were the first letters of *Ιησοῦς Χριστὸς Θεοῦ Ὑιὸς Σωτήρ* (Jesus Christ, Son of God, Savior), a mystical play on letters called notarikon. Cf. Dornseiff, Das Alphabet, p. 136 ff. The 153 fish thus said: *Ἰησοῦς Χριστὸς Θεοῦ Ὑιὸς Σωτήρ — κύριός ἐστιν*. (is Lord).

5. It is highly probable that further examples of letter mysticism can be found in the texts of the New Testament. Without wishing to present my observations as completely reliable evidence of conscious gematria, I can, for example, refer to the fact that in the nineteenth chapter of the Book of Revelation, the mysterious and unnamed rider on the white horse (verse 11) is called πιστὸς καὶ ἀληθιν. point out that in the nineteenth chapter of the Book of Revelation, the mysterious and unnamed rider on the white horse (verse 11) is called *πιστὸς καὶ ἀληθινός* ("faithful and true"), the numerical value of the two adjectives being 179 (96 + 83). In the following verse (13), he is called *ὁ λόγος τοῦ θεοῦ* (the word of God) — numerical value 179 (15 + 62 + 54 + 48). And the numerical value of *ὁ ὑιὸς τοῦ θεοῦ* (the Son of God) is also 179. The word (*λόγος*) is, after all, God's son (cf. John, chapter 1). Bousset (Die Offenbarung Joh., p. 495) certainly opposes the interpretation that the rider on the white horse is the Messiah, but I do not find his doubts justified. Who else but Christ himself could be called "king of kings" and "lord of lords" (verse 16)? In verse 15 it

is said: "And he shall rule them with a rod of iron," a reference to Psalm 2:9, where the Messiah is undoubtedly meant. The first line of the Gospel of John would then probably also be of a literal mystical nature: ὁ λόγος (the word) = ὁ υἱὸς (the son) — "In the beginning was the Word (= the Son)." Another case of gematria is perhaps the name of the star ἄψινθος (wormwood) in the eighth chapter of the Book of Revelation: ἀστὴρ μέγας καιόμενος ὡς λαμπάς ("a great star burning like a torch"). The morning star was a symbol of Jesus, cf. Rev. 22:16: ἐγὼ εἰμι ἡ ῥίζα καὶ τὸ γένος Δαυείδ, ὁ ἀστὴρ ὁ λαμπρὸς ὁ πρωϊνός ("I am the root of David and the descendant of his line, I am the bright morning star"). The numerical value of ἄψινθος and Ἰησοῦς is the same: 87.

6. Finally, it may be pointed out in this context that when the Hellenistic Christians fixed the time of Jesus' birth, the Gospels, as is well known, provide no basis for determining the time of this event. Perhaps literal mystical speculation may have played a role. It has been assumed that Christians adopted December 25 as the date of Christ's birth from the Mithraic religion, since that was the birthday of the sun god Mithras. However, it is difficult to understand why Christians, who took Sunday as their day of rest instead of Saturday in order to distinguish themselves from the Jews, would have deliberately set the birthday of their founder according to the pattern of the Mithraic religion. The strange coincidence of the two communities' most important holidays may, however, be a coincidence. In the Book of Revelation, a and o (alpha and omega) are symbols of the deity: their combined number is 25 (α = 1 + ω = 24). This may have been the reason why the day of the Annunciation was set as the

25th day of the first month of the year (March) and the birth of Christ as December 25, nine months later.

The examples given above of Christian alphabetical mysticism in late antiquity should be quite evident, even if in one or two cases one might have to consider the possibility of coincidence. However, it is beyond doubt that in early Christianity a gematric system of precisely the kind I have followed here was in use. In a manuscript in the Cathedral Library in Lucca (see Dornseiff, p. 101 for more details), the following statement is found in connection with the prophecy in Revelation 13: "*hic sapientia utitur [ev. uertitur] ut computetur per l(itte)ras nomen illius qui dicitur:* A N T I C R I S T U S" I XIII XVIIII VIIII III XVII VIIII XVIII XVIIII XX XVIII

Thus, $a = 1$, $c = 3$, $i = 9$, $n = 13$, $r = 17$, $s = 18$, etc.

From the branch of early Christianity that regarded the Gospel of John and the Apocalypse as its main religious texts, alphabet mysticism undoubtedly spread to the Western Church.

Of particular interest is that this mysticism actually still lives on in the Roman Catholic liturgy, as eloquently testified by the first of the examples given below of Christian alphabetical magical inscriptions that still existed in recent times:

1. At every consecration of a new church, as Dieterich, Rn. Museum 56, p. 104, has pointed out, immediately before the beginning of the consecration ceremony, ashes were scattered on the temple floor in two intersecting stripes, whereupon, according to the Pontificale Romanum — "the pontiff, having received the miter and pastoral staff, begins at the corner of the church on the left side, following the lines drawn above, and with

the tip of the pastoral staff writes the Greek alphabet on the ashes in distinct letters so that they occupy the entire space, as follows. Then, beginning in the same manner from the corner of the church to the right of those entering, he writes the Latin alphabet on the ashes in distinct letters, namely these." Then follows the exorcism: "I exorcise you, creature of salt, in the name of our Lord Jesus Christ — that you may sanctify the consecration of this church and altar and drive out all demonic temptations... I exorcise you, creature of water, in the name of God the Father, the Son, and the Holy Spirit, that you may repel the devil from the place of the righteous, that he may not be in the shadows of this church and altar." Dieterich adds: "I do not know how the alphabets are officially interpreted by the Church. I think we know enough." Without turning to a mystery tradition that may still exist within the Church, we should nevertheless be able to get to the bottom of the secret: this is a case of alphabet magic inherited from early Christianity. The numerical value of the Greek alphabet is, as already mentioned, = 300; that of the Latin alphabet is 24 less, i.e. = 276. The sum of the numerical values of the two alphabets is 576 = 24 × 24, the number 24, which is sacred in Christian mysticism (as in alphabet magic in general), multiplied by itself.

The ceremony described above and interpreted in terms of its magical principle is clearly the same one to which Tegnér refers in his description of the consecration of Lund Cathedral in the poem "Gerda":

"Peace and bliss be upon this house!" cried the bishop, and in the gravel scattered on the floor, he then wrote two crosses, the image of the Gospel and the law; — evil spirits flee from the

hidden power of the dragons from the sacred room, mentioned for abacturium." (Cf. Esaias Tegnér's collected writings, jubilee edition, 1, p. 223.) However, it seems that Tegnér had intended the two alphabets to be the Hebrew and the Greek, not the Greek and the Latin as in the Catholic Church today.

2. Dieterich (Rh. Museum 56, p. 93) mentions a letter cross prescribed against the plague (Romanusbüchlein, printed by Bartels, Berlin, p. 44):

Z D J A B Z H G F B F K S B J Z S A

The numerical value of the nine vertical letters (Z—A) is 90, the numerical value of the nine horizontal letters (B—S) is 82. The sum of the whole is thus 172, which is = 4 × 43 (a prime number). In Christian numerology, the sacred number of the cross should have been 4. The number 4 is clearly visible in the shape of the cross (in Germanic areas, the cross is a continuation of the pagan symbol for Thor, whose number was 4, cf. § 20). The fact that the number 9 is included in the number of letters is certainly also due to magical considerations (9 was the number of miracles, cf. Weinreich, Triskaidekadische Studien, p. 113 and (on the significance of the number 9 in Dante's mysticism) p. 109 ff., and 18 was the number of Odin in runic magic, cf. § 32).

3. In Dieterich's article (Rh. Museum 56, p. 89, note 3) there is mention of a clock in Wehrda just outside Marburg, on which the following backward rows of the alphabet are written with some letters upside down

: QPONML | KIHGFE. The numerical value of E—K is 45 and of L—Q 81. Each line thus contains a multiple of 9; 45 = 5

× **9** and 81 = 9 × **9.** The gematria is thus based on the sacred number of the miracle (9).

4. On p. 79 of his dissertation, Dornseiff reports a "Schutzbriff wider Unglicker" from Elz with the following appearance.

Here we find 13 crosses in the vertical row and 14 in the horizontal row, giving a total of 27 = 3 × **9** (the number of miracles). The sum of the numerical values of the letters is: 1 + 7 + 12 + 13 + 18 + 21 + 20 + 20 + 15 + 10 + 5 + 4 = **146** (the vertical row), to which is added: 2 + 8 + 9 + 16 + 17 + 21 + 20 + 19 + 14 + 11 + 6 + 3 = **146** (the horizontal row excluding the central symbol X, which has already been counted) = 292. This number is **4** × 73 (a prime number). Thus, the same numerical symbolism as in the second letter cross just discussed! It is clear that the symbols were chosen with reference to a mathematical scheme: each of the four arms consists of 6 letters with the numerical values 74, 72—73, 73. The cross contains exactly 24 letters. What the eleven arrows symbolize is not so easy to figure out. Perhaps they represent misfortunes that bounce back from the miraculous cross, and a number lower than the sacred twelve (cf. 2 × 12 letters) has been chosen.

5. In the same place, Dornseiff reports a transcript made in 1910 of a paper found in a money pouch belonging to a farmer from Niederlaukern.

Front: Back: A B C D E F S A T O R S T U V W G A R E P O R X X X X H T E N E T Q J N R I I O P E R A P O N M L K R O T A S

The "front" (which can of course just as well be regarded as the back) contains the alphabet, running around the edges and continuing into the second line from the left, then U is repeated with the variant signs V and W, followed by X four times and below that JNRI, apparently Jesus Nazarenus Rex Judaeorum (cf. John 19:19). The "back" contains a widely spread rhyme used for healing purposes, which can be read equally well backwards and forwards: "Man kann einen ausgeübten Zauber wirkungslos machen, wenn man den benutzten Zauberspruch rückwärts hersagt oder -liest ... Es lag also nahe, Wortzusammenstellungen auszudenken, welche vor- und rückwärts gesprochen oder gelesen immer gleichlauten." Sökeland, Zeitschrift f. Volkskunde 25 (1915) p. 246. (For similar examples, see Dornseiff, p. 63). If we calculate the numerical value of the two inscriptions, we find: The letters on the "front side" together form the numerical value 382 (21 + 104 + 109 + 73 + 75), a number that cannot be divided evenly by any number higher than 2; 382 = **2** × 191, which is a prime number. It is the second person of the Godhead who is invoked, note that JNRI is included in the combination. — The five lines on the "back" show the numerical values: 69 + 52 + 61 + 52 + 69 = 303 = **3** × 101, which is also a prime number. In early Christian mysticism, 3 was the symbol of the deity as a whole, the Holy Trinity, cf. § 6, 3. If we examine it more closely, the inscription also contains three divine symbols. The letter sequence SATOR AREPO TEN contains all the letters of PATER NOSTER as well as the two symbolic letters A and O (cf. § 6, 3). This letter amulet probably came about by rearranging the letters in an earlier cross-shaped arrangement

P A T E R P A T E R N O S T E R O S T E R with the addition of the magical A and O twice to achieve the mystical

purpose of the letters: a combination of letters forming a formula that is identical when read forwards and backwards, the numerical value of the letters symbolizing the Holy Trinity. I presented this interpretation in a lecture at the Philological Society in Lund on November 16, 1925. Before I had time to publish it, Felix Grosser, independently of me, showed in Arch. f. Religionswissenschaft 24, pp. 165–169 (autumn 1926) that A and O and the letters in PATER NOSTER can be found in the mystical formula. He completely disregarded the numerical values of the letters and the INRI formula combined with them. It was precisely the numerical values 2 and 3, combined with prime numbers, that led me to search for a combination of symbols in the latter inscription corresponding to INRI in the former. I then found PATER NOSTER and A and O. Previous attempts have been made to list the meaning of the SATOR formula by calculating the numerical values of the letters (C. E. Gleye, see Ahrens, Altes und Neues aus der Unterhaltungsmathematik, Berlin 1918, p. 181), but the result has been incorrect, since K has not been included in the Latin alphabet, thus giving N = 12 instead of 13, etc.

9. I have now gone through all the material collected by Dornseiff and Dieterich on so-called alphabetical mystical inscriptions, insofar as the application of gematria according to the system α = 1, ω = 24 and a = 1, z = 23 could be traced. A comparison with my sources shows that the cases where I have been able to demonstrate this are extremely numerous, to which can be added the examples I have found in the New Testament texts (cf. § 7 above). In "Corpus der ABC-Denkmäler" (Dornseiff, pp. 158–168), I have only omitted fragments that do not appear to be capable of being supplemented with any degree

of probability, as well as a series of inscriptions with archaic alphabets. Quite often, for example, there are varying types of the Greek alphabet with 26 letters, especially on vases (cf. Dornseiff's "Corpus" I, 3, 7, 8). In one case, a leaf-like symbol repeated three times has been added to the 23 letters of the Latin alphabet (where the symbols for *e, f,* and *l* have a runic character) (the same symbol is also found on some of the Mithras monuments). The alphabet rows with 26 symbols may possibly refer to an invocation of "the thirteenth god" (*τρισκαιδέκατος ϑεός*, see above § 5): 26 is = 13 + 13, and 351 (the gematric sum of an alphabet of 26 characters) is 27 (i.e. 3 × 3 × 3) × **13.**

In § 5, I have reported a series of alphabetical mystical inscriptions found in Roman military camps, at least two of which can be traced with certainty to practitioners of the cult of Jupiter Dolichenus. The followers of this typical soldier religion in the Roman Empire of the 2nd–4th centuries seem to have been particularly fond of letter magic. Cf. Hülsen, Röm. Mitt. 18 (1903), p. 74. As I have previously pointed out, it is particularly the number 13 that seems to have had a central significance in the numerology of this religion. It is therefore of interest to examine other Dolichenus inscriptions than those of an alphabetical nature—here, the same gematric peculiarity may perhaps be observed. I have therefore examined the numerical value of all the Dolichenus inscriptions in Cumont's collection of inscriptions of Mithraic and related originFranz Cumont, Textes et monuments figurés relatifs aux mystères de Mithra, 1 & 2 (cited here as T & M. 1 and 2, respectively, or in the collection of materials § 11 ff. for brevity's sake, only I and II). I have examined the numerical value of all the Dolichenus inscriptions included there. There are only five of these, but all but one (an

inscription that is not entirely legible, No. 83 (II, p. 108): IOVIS DOLICH ...) show the same pattern as previously investigated material, namely that when the name of the god appears in the initial line, this has a numerical value that includes the number 13:

1. The initial line of inscription no. 116 (II, p. 113) reads: IOMA DOLICHENO (**13** letters, interpreted by Cumont as: *Iovi optimo maximo aeterno Dolicheno*). IOMA = 36 (9 + 14 + 12 + 1); DOLICHENO = 81 (4 + 14 + 11 + 9 + 3 + 8 + 5 + 13 + 14); 36 + 81 = 117 = 9 × **13.**

2. The initial line of inscription no. 117 (II, p. 113) reads: IOMD = 39 (9 + 14 + 12 + 4) = 3 × **13.**

3. Inscription no. 470 (II, p. 160) begins with the line: IOVIOM (i.e. *Iovi optimo maximo,* the next line reads: *summo exsuperantissimo,* i.e. Jupiter Dolichenus). The numerical value of IOVIOM is 78 (9 + 14 + 20 + 9 + 14 + 12) = 6 × **13.**

4. The first line of inscription no. 65 b (II, p. 105) should not, according to Cumont, be reconstructed with IOVI but with IOM (= *Iovi optimo maximo*); the numerical value of the line IOM DOLIC AVG (= *Dolicheno augusto*) is 104 (35 + 41 + 28) = 8 × **13.** A reconstruction with only I before DOLIC AVG also gives a gematric sum containing 13 (9 + 41 + 28 = 78 = 6 × 13). For reasons of space, which are difficult to comment on without having seen the original, this alternative seems less likely.

In five clearly legible inscriptions that definitely belong to the cult of Dolichenus (nos. 1–3 above and nos. 1–2 in § 5), we have thus been able to demonstrate gematria based on the number 13. A sixth case is most likely no. 4 above. We therefore

have every reason to assume that the four inscriptions nos. 3–6 in § 5 also originate from the soldier religion whose chief god was Jupiter Dolichenus, or from the related cult of Mithras, in which the number thirteen was also sacred. All of the inscriptions have been found in places of military importance within the Roman Empire.

10. The culturally far more important Mithraic doctrine was closely related to the religion of Jupiter Dolichenus. Both originated in essentially the same region of Asia Minor, Commagene, and spread to the rest of the Roman Empire with Oriental legionaries. Archaeological finds confirm that their shrines were located next to each other in the Roman army camps. The two cults certainly had certain similarities inherited from a common origin (cf. Cumont, T&M. 1, p. 333, note 2). It is therefore interesting to investigate whether the far more numerous Mithraic inscriptions in a series of cases reveal that they were made with reference to alphabet mysticism. In Mithraism, number mysticism clearly played a very important role. The sacred number above all others in Mithraism was the number 7 (cf. Cumont, T&M. 1, p. 119 f. and 316). If we did not know this from the statements of late antique authors (Origen, etc.), we could conclude this from a study of the images on the many monuments left behind by this religion, which was once so powerful in the Roman Empire: On the Mithra monuments we see seven stars, seven altars, seven trees, seven swords, seven Phrygian caps, etc. (cf. e.g. fig. 23, p. 198, and fig. 163, p. 311, in T&M. 2). As I will show later, there are certainly cases of regular gematria among Mithraic inscriptions, especially when it comes to amulets. On the larger monuments, however, a simpler method of letter mysticism has generally been used: the aim has

been to achieve a certain number of letters in the line or lines where the name of the god appears, or in the part that forms the center of the inscription. The method is strikingly similar to what we know about many runic inscriptions. Cf. Magnus Olsen, Om Troldruner, p. 10 ff. What is further remarkable is that not only the actual letters, but also the word-separating signs are usually counted in order to achieve a certain number of characters. In the Nordic countries, this is the case, for example, with the magical inscription of Sigtunadosan, cf. Magnus Olsen's aforementioned work, p. 17 ff.; I will provide many other examples in the third chapter of this book. e.g. with the magical inscription of Sigtunadosan, cf. Magnus Olsen's aforementioned work, p. 17 f.; I will provide many other examples in the third chapter of this book. Furthermore, the Mithraic monument inscriptions use an equivalent of our Scandinavian "bindrunes": two, sometimes three signs are combined into a whole. In many cases, this approach allows the desired number of characters to be obtained in a line of inscription. That the number of letters in words has played a role in magic and mysticism is a well-known fact, which I have already mentioned above. Here I can further recall the great importance that the so-called magic papyri ("Zauberpapyri") attach to the number of letters in magical names. Those interested can find examples in the aforementioned work by Dornseiff, p. 61 f. The Jewish Talmudists and Kabbalists placed an immense value on the secret names of Yahweh, with 12, 42, and 72 letters respectively. Cf. Erich Bischoff, Die Elemente der Kabbalah (Berlin 1913/14) 2, p. 102 ff. From this point of view, I have examined a fairly large number of inscriptions on the Mithras monuments, namely all those reproduced in the illustrations in Cumont's major work

Textes et monuments. Unfortunately, I have had to leave out the inscriptions that appear only in the section "Textes épigraphiques." A comparison with the illustrative material has shown that in several places the texts provided by Cumont do not fully correspond to the photographic reproductions and the drawn copies: the distinguishing marks are reproduced very inconsistently in the text section. From a purely religious-historical research point of view, such oversights can, on the whole, be regarded as adiaphora, but when it comes to letter mysticism, such small signs play a decisive role. In this type of magic, the rule applies that every written sign, whether it denotes a sound or not, must be counted. This principle is confirmed not only by the Mithraic inscriptions but also, as we shall see later, by the Nordic runic inscriptions, which continue the basic rules of alphabetical magic in Mithraism.

I have therefore had to limit myself in the present study to considering the inscriptions reproduced in the illustrations in the section "Monuments figurés" in Cumont's great work (T&M. 2, 185—455 = II in the following collection of evidence).

11. A review of this by no means insignificant material has shown that the number that we encounter in most cases in the number of characters in the initial lines with the name of the god or in the most prominent place of the inscription, sometimes in a series of lines, is precisely the number 7, the sacred number of Mithraism above all others:

1. In fig. 18 (II, p. 192), the following is written in large letters at the bottom in the most prominent place: C. C. AVFIDII IANVARIVS. = 21 characters (18 letters + 3 punctuation marks) = 3 × 7 characters. I cannot comment with

certainty on the inscription on the bull, as the reproduction here is less clear. If there is a punctuation mark between NAMA and SEBESIO and a punctuation mark between each word in the line DEO SOLI INVICTO MITRHE (several such dots can be discerned), we also get a multiple of 7 here, namely 35 = 5 × 7 (31 letters + 4 punctuation marks).2. In fig. 20 (II, p. 194), to the right of the bull, we read: SOLI INVICTO L. AVR. SEVERVS CVM PAREMBOLI[S] ET . YPOBASI VOTO FECIT (The letter in brackets has probably been erased; it stands at the end of a line). Including this, we get 56 = 8 × **7** characters.

3. Fig. 24 (II, p. 198) has a single line above the image: DEO SANCTO M͡I SACRATH͡IS DP PLACIDVS MARCELLINVS LEO ANTISTITES ET GVNTHA LEO — 63 letters (including two ligatures) = 9 × **7** characters. Above the line there are 10 leaf-like figures instead of punctuation marks, which should therefore probably not be counted.

4. Fig. 36 (II, p. 208) has as its initial line: NVMINI • INVICTO = 14 = 2 × **7** characters.

5. Fig. 38 (II, p. 210) has as its initial line SOLI INVICTO DEO = 14 = 2 × **7** letters. However, two pillar-like punctuation marks above and a full stop after the first word disrupt the numerical harmony. The rest of the inscription, though, has 42 = 6 × 7 letters and five dots and two arrows, so it's 49 = 7 × 7 characters. Maybe some words got erased in the first line, or maybe the separators were just put there by mistake.

6. In fig. 53 (II, p. 224), only the word MITHRAS = **7** letters can be read.

7. In fig. 59 (II, p. 228), the following foundation inscription can be read: ALCIMVS • TI • CL • LIVIANI • SER • VILC • SOL • M • V • DD Thus, 41 characters. However, according to Cumont's information in the text section (inscription no. 69, II, p. 106), it should read VILIC (= *vilicus*). The scribe has probably forgotten to reproduce a letter here. In that case, we are again dealing with a multiple of 7 in the total number of characters: 42 = 6 × **7**.

8. Fig. 62 (II, p. 231) has 14 = 2 × **7** characters in the top line of the central inscription: L • FL • HERMADION. This is followed by HOC MIHI LIBENS DON • DEDIT. There appear to be 22 characters, but the last two letters probably form a ligature (they are very close together in the drawing), in which case there are 3 × 7 characters.

9. Fig. 66 (II, p. 235) has an image of the quadrigan and above the inscription: SANCTO • DOMINO INVICTO • MITHRAE IVSSV • EIVS LIBENS DEDIT = 49 characters, i.e. **7** × **7**. At the top of the monument is DEDIT. M. MODIVS (= 14 characters, which should be supplemented with an additional dot and the name ACATHO, thus also here most likely a multiple of **7** (21 characters).

10. Fig. 67 (II, p. 236) bears the inscription on the base: SIG INDEPREHENS[I]VILIS. DEI. L. SEXTIVS. KARVS. ET C. VALERIVS. HERACLES. SACERDOS. S. P. P This is 77 = 11 × **7** characters. It should be noted that the artist omitted the letter in brackets in the second word, which I have inserted according to Cumont's text (inscription no. 138); in the drawing, M appears instead of N as the second letter in the same word. With regard to the letters, Cumont's text is probably more

reliable, but with regard to the punctuation, the reproduction must be assumed to be more accurate.

11. Fig. 68 (II, p. 238) has as its initial line: CVALERI = **7** letters. The total number of characters in the inscription appears to be 109. However, the illustrator may have overlooked one or two dots. If, for example, three dots have been omitted, the total number of characters is 112 = 16 × 7. Only a meticulous examination of the original can determine this.

7) characters; the third and fourth letters from the end of the last word form a monogram (the school is thus regarded as a character, similar to a bind rune). On a rectangular field below the monument (see fig. 3) there is an inscription, the last two lines of which consist of 42 (6 × **7**) characters each (in the last one, TV probably forms a *restituit* monogram). The first line, on the other hand, appears to have 37 characters, but two pairs of letters are so close together that we may be dealing with ligatures (monograms) that the artist did not take into account. According to Cumont's text (inscription no. 134), however, it should read F. for FIL., in which case we would have 35 (5 × 7) characters in this line. It is unlikely, however, that the artist would have drawn two non-existent letters there.

13. Fig. 81 (II, p. 248) has the inscription Q. FVLVIVS. ZOTICVS D. D. D = 21 characters (?) at the base. However, some of the points indicated here are only faintly visible in the reproduction. A definitive statement about this inscription can only be made after examination of the original.

14. Fig. 85 (II, p. 250), a detailed drawing, shows above a representation of Mithras killing a bull the inscription:

OMNIPOTENTI DEO MITRHAE • APPIVS = 28 (4 × **7**) characters. The dedication to the god (the text before the dividing mark) consists of 21 (3 × **7**) letters.

15. Fig. 90 (II, p. 255) shows an altar with the inscription: SOLI, below which is INVICTO MITHRAE and below that SACRVM. The middle row, a dedication to the undefeated Mithra, consists of 14 (2 × **7**) letters (cf. § 13, 1).

16. Fig. 120 (II, p. 277): DEO. SANCTO. INVICTO. LVCAIVS. EXVOTV PO = 35 (5 × **7**) characters. The initial row: DEO. SAN also consists of **7** characters.

17. Fig. 126 (II, p. 281) shows an altar with an inscription whose initial row is NABARZE = **7** characters. The inscription as a whole appears to consist of 72 characters. An examination of the original would probably show that there are only 70 characters, as two pairs of letters may be monograms that have been inaccurately reproduced by the transcriber.

18. Fig. 131 (II, p. 284) shows a slightly damaged plate with the traditional depiction of Mithra killing the bull, and below it the inscription: AVR THEOF EX VOTO (= *Aurelius Theofilus ex voto*) = 14 (2 × **7**) letters (punctuation marks are not shown).

19. Fig. 166 (II, p. 308) shows the scene with Mithras killing the bull and below it the unusually long inscription. According to Cumont (II, p. 134, inscription no. 256), it reads: *L. Aelius Hylas vicesimae libertatis pro salute et Horientis filii sui et Apuleiae eius signum numinis cum absidata | ex voto posuit.*: LAEL. HYLAS. XXLPR. SA. ET. HORIENTIS. FIL. SVI. ET. APVLEIA. EIVS. SIG. NVMINISCVM. ABSIDATA (New line) EXVOTO. POS.= 84 (12 × **7**) characters. The frequent use of

letter ligatures, including a triple ligature, indicates that a certain number of characters was sought here.

20. Fig. 174 (II, p. 315) shows the following inscription in Greek under the bull-slaying Mithra: ΑΥΡΗΛΙΚ ϹΤΕΦΑΝΟϹ ΘΕΩ ΜΙΘΡΑ ΕΥΧΑΡΙϹΤΗΡΙΝ (sic, cf. Cumont II, p. 134) = 35 letters (no punctuation marks) = 5 × **7** characters.

21. Fig. 177 (II, p. 316) shows **7** characters in its initial row; for the inscription in its entirety, see § 15, 2 below.

22. Fig. 194 (II, p. 327) has the inscription FECIT INPENDIO SVO = 14 (2 × **7**) characters under the bull-slaying Mithras, including two monograms, which indicates that a certain number of characters was intended. Cumont (II, p. 146) states that the inscription is defective. Judging by the reproduction, it is unlikely that any damage has occurred in front of the word FECIT. It is probable that the name of the monument's patron was carved above Mithras' head. It is unlikely that it would have been written after SVO, where there is a damaged section; in that case, the word FECIT would have started much further to the left.

23. Fig. 198 (II, p. 329) shows the following inscription: According to Cumont (II, p. 147, inscription no. 371) = *Deo Invicto Mithrae Caute T. Flavius Verecundus colonia Savaria centurio legionis XIIII geminae Martiae victricis votum solvit libens laetus merito.* (| denotes a new line): DIMC | T. FLAVIVS | VERECVNDVS | CL. SAVARIA | C. LEG. X IIII | G. M. V. | .V. S. L. L. M. = 56 (8 × **7**) characters, arranged in 7 rows (X and IIII should be counted as two characters, with a clear space between them). The combination of three letters into a ligature

and the placement of the dots (separators also at the beginning of a row, the seventh and last) indicate that a certain number of characters was intended. The first line is also of gematric nature: DIMC = 4 + 9 + 12 + 3 = 28= 4 × **7** (for similar cases, see § 15 below).

24. Fig. 206 (II, p. 332) shows the inscription: DIM | VINDIL. CVPITVS | SIG. L. XIIII. G. A. ET | VIND. IVLIANVS. | VPPATRE. PATERNO = 56 (8 × **7**) characters. However, in the reproduction it appears as if there is a punctuation mark before the last two letters of IVLIANVS. Since such a punctuation mark is meaningless, the original probably does not have or did not originally have such a mark.25. Fig. 207 (II, p. 332) shows an inscription consisting of 42 (6 × **7**) letters (including 7 monograms) and 12 punctuation marks visible in the image. The scribe probably overlooked two such marks at the end of the two main lines. In that case, the inscription would consist of 42 + 14 characters.

26. Fig. 208 (II, p. 333) has the inscription M S EXBO P = **7** letters (no punctuation marks) under the bull-slaying Mithra. Perhaps partly in connection with Cumont I MS, Cumont II, p. 148 (inscription no. 383) sees the rest of a name ending in *-us*. This can be interpreted as: *M(ithrae) S(oli) ex bo(tu)* — for *votu!* — *p(osui)*.

27. Fig. 223 (II, p. 352) shows inscriptions on the front sides of two altars. On the left, the initial line is clearly visible and reads: DEO SOLI = **7** characters. On the altar on the right, the initial line reads: D S INV (= *Deo Soli Invicto*). The reproduction shows several cracks in the stone, making it impossible to determine whether there were dots between the three

abbreviations. If this is the case, as is highly likely, we should expect 7 characters here as well: D. S. INV (at the end of a line, the separator is often omitted as unnecessary). The total number of letters in both inscriptions cannot be calculated due to the damaged condition of the monument. The inscription on the left, which begins with **7** letters in the first line, consists of **7** lines.

28. Fig. 290 (II, p. 377) shows an altar above which Mithras rising from the rock bears the inscription: DEO IN MI (= *Deo Invicto Mithrae*) = **7** letters (the separators are replaced by large spaces). At the base of the altar is written: SIVECRACISSIVS = 14 (2 × **7**) letters. Above this, within a square field: SENILIVS CARANTINVS . C . MEDIO . M. V. S. L. LM (cf. II, p. 155) = 32 characters, and above this . P . GENERICEM = 10 characters. The entire inscription on the altar thus consists of **7** + 14 (2 × **7**) + 42 (6 × **7**) = 63 (9 × **7**) characters. The result has been achieved by monogramming two, sometimes even three, letters.

29. Fig. 299 (II, p. 387) shows the inscription under the bull-slaying Mithra: D. S. I. IMP. C. AMANDINIVS || VERVS. BVC. V. S. L. L. M. = 42 (6 × **7**) characters. However, the dot in front of the fourth letter from the end (S) is only faintly visible in the reproduction. Judging by the consistency with which the other dots have been placed, it is unlikely that it is missing.

30. Fig. 304 (II, p. 389) shows, in a field to the left of the zodiac, which forms a ring around the bull-slaying Mithra, the inscription: VLPIVS SILVANVS = 14 (2 × **7**) characters. In a field to the right, the following can be read: EMERITVS. LEG II. AVG VOTVM SOLVIT = 28 (4 × **7**) characters. The

monument also has two inscriptions at the bottom, whose total number of characters is 15, but which probably form a two-character (TV) monogram, so that strictly speaking there are 14 characters.

31. Fig. 311 (II, p. 393) shows a rectangular field with the inscription: L SENIVS CASTVS LEG VI D P = 21 letters. Between them are four leaf-like distinguishing marks. Above, within a circular frame, is the inscription: DEO. The monument thus shows 21 + 4 + 3 = 28 (4 × **7**) characters. The numeral VI has a line above it and thus forms a unit, like II in the previous inscription.

32. Fig. 446 (II, p. 502) shows an inscription with **7** characters in the initial row: INVICTO and likewise **7** in the following: AVG. AVR (without a full stop at the end of the line). The inscription is not legible in its entirety. The third line also appears to consist of seven letters, and the remaining three lines have approximately the same number, where only fragments of letters are discernible.

12. It can hardly be a coincidence that in almost 80% of all the inscriptions that can be studied both on the basis of Cumont's text and illustrative materialFor those who do not have Cumont's work available, it should be pointed out that only a small number of the 493 illustrations in the monument description depict objects with inscriptions., the signs appear to be grouped with reference to the number 7. This number was, of course, the sacred number of the Mithraic religion above all others. Within this mystery religion, however, other numbers were naturally also sacred. We know, for example, that the 16th day of the Avestan-Persian lunar calendar was dedicated to

Mithra (cf. T&M. 1, p. 303). If we now examine the illustrations depicting inscriptions in which we have not found any adaptation to the number 7, we generally find one to the number 16. This was the special number of the god Mithras, while the number 7 referred to both Mithra and the sun (the 7th sphere of the universe). The special number of the sun was in all likelihood 15, as in the Mithraic calendar the days in the middle of the month (the 15th and 16th) were most certainly dedicated to the sun and Mithras. Mithra, as we have seen, was for the ancient Magi the god of light, and since light is carried by the air, he was believed to inhabit the middle zone between heaven and hell, and for this reason he was given the name *μεσίτης*. In order to mark this quality in the ritual, the sixteenth day of each month, i.e. its middle, was consecrated to him. Cumont T&M. 1, p. 303. I have found six inscriptions that show adaptation to the number 16, and three where the number 15 is included in the sum of the characters.

1. Fig. 134 (II, p. 285) shows the inscription LONG SALARA EXV POSIT = **16** letters (including two monograms), with no punctuation marks. The inscription is located below a destroyed image of Mithra killing a bull. Cumont (II, p. 135) assumes that the inscription means: *Longus salararius ex voto posuit*. The omission of letters and the use of monograms indicate that a certain number of characters was sought.

2. Fig. 152 (II, p. 296) has, beneath three now fragmentary relief representations from the life of Mithras, the inscription: S. I. M. C. SPEDVALERIANVS. AVC. COL. DD = 32 (2 × **16**) characters. The dot after the third letter from the end has been

erased by a crack in the stone. DD is an abbreviation (= *donum dat*), which very often appears without punctuation at the end.

3. Fig. 175 (II, p. 315) shows the inscription above the bull-slaying Mithras: DEO INVICTO MITHRE = **16** letters (without dots), E for AE indicates that a certain number of letters was intended.

4. Fig. 177 (II, p. 316) shows an altar bearing the inscription: INVICTO | MYTHRÆ | DIOSCO | RVS. MARCI | VSLM = 32 (2 × **16**) characters; the initial row also has 7 letters, and the second row with the name of the god itself shows gematria (cf. § 15, 2).

5. Fig. 258 (II, p. 368) shows a hexagonal pillar bearing the inscription on one side: D. I. M | M. T͡ER. | SENE | CIO | P. S. P. Thus, there are **16** letters and **7** dots.

6. Fig. 423 (II, p. 489) shows 14 (2 × **7**) letters in the initial row. The second word is read by Cumont (II, p. 469) as τύχη.: *ΑΓΑΘΗΙ ΤΗΧΗ* (sic!) *ΗΛΙΩ*, between these letters there are two punctuation marks, one leaf-shaped and one normal (a dot), thus **16** characters. The entire inscription consists of 96 (6 × **16**) characters.

7. Fig. 71 (II, p. 240) shows the inscription in two places: SOLI INVICI MIT D D L AGRIVS CALENDIO = 30 (2 × **15**) letters. The inscription has 7 leaf-shaped separators in one place and 8 in the other. Their sum is also **15** (8 + 7). It is quite clear that the intention was to achieve a certain numerical ratio. The double inscription also begins with the name of the sun, whose sacred number must have been 15.

8. Fig. 85 (II, p. 250) has the inscription CLAVDIVS TARRONIVS DEXTER VC DICAT = 30 (2 × **15**) letters at the bottom. There may be a dot between the second and third words, in which case closer examination would reveal that there is a ligature somewhere. Above, the same monument (cf. § 11, 14) has an inscription of 28 (4 × 7) characters.

9. Fig. 304 (II, p. 389) shows two inscriptions at the bottom, whose total sum is 15. There may be a ligature somewhere here, in which case a different interpretation is correct (cf. § 11, 30).

13. Finally, of some interest in view of the important role of the number 24 in runic magic is the existence of Mithraic inscriptions, in which there may be an adaptation to this number. However, an alternative and more likely assumption is that letter magic based on the number twelve existed. It should be noted that, according to late antique magic, the 24 letters of the alphabet were associated with the twelve signs of the zodiac, so that the letters represented a constellation sign in pairs, see Dornseiff, p. 133. The twelve signs of the zodiac played an important role in the Mithraic religion and are very often depicted on monuments. I have observed the following cases:

1. Fig. 90 (cf. above § 11, 15) shows the following inscription: SOLI | INVICTO MITHRAE | SACRVM = **24** letters (separators are not indicated).

2. Fig. 196 (II, p. 281) shows the following inscription: NABARZE | DEO | PRO. SAL. AMPLIATI | AVG. N. DISP. ET | SVA. SVORVMQ | OMNIVM | PROTAS. VIKAR | EIVS (without a period at the end). Thus, 72 (3 × **24**) characters. The initial row contains 7 characters (cf. §11, 17).3. Fig. 166 (II,

p. 308; cf. above § 11, 19) shows above Mithra and the bull the inscription: IO. S. INVI. | DEO GENITORI | R. N. = **24** characters. At the bottom, the same monument bears an inscription with 84 (12 × 7) characters, cf. § 11, 19.

4. Fig. 423 (II, p. 489, cf. § 12, 6 above) shows an inscription with 96 (4 × **24**) characters, but 96 is also = 6 × 16 (Mithras' special number).

14. The investigation presented above in §§ 11–13 provides an almost complete survey of all inscriptions on Mithraic monuments, which, with the help of Cumont's extensive work, can be assessed both through illustrations and transcriptions. The only things I have not included in the discussion are a few fragments and one or two inscriptions where the letters in the reproduction are too blurred to allow any interpretation of the total number of characters. It has become apparent that the characters appear in such numerical relationships that it must be considered clear that the followers of Mithraism followed certain numerological principles when making their religious inscriptions. In several cases, the mystics have used rather elaborate means to achieve their purpose, such as arbitrary choice of punctuation marks and monogramming of letters where space hardly requires it. What has emerged so far concerning the numerology of the Mithraists is a very simple form of alphabet magic. However, the matter is of great interest, for perhaps we have here the model for the letter counting that research has established among our ancient Norse ancestors (cf. § 1). It would be strange, however, if regular gematria ("letter weighing") had not also been practiced in Mithraic circles. Such may occur in places on monuments, but we must primarily expect to find it on

the amulets worn by the followers of the Oriental soldier religions in the Roman Empire. One of the strongest motives for the Germanic warriors in the Roman army to seek insight into the art of letters was certainly the desire to be able to wear, like their comrades, objects that were powerful enough to bring their wearer luck and success, protection against dangers in battle, the evil eye, and other real or imagined risks. The oldest runes are found on amulets or weapons (the spear from Øvre Stabu, the Vimose finds, etc.). As I will show below, a whole series of runic amulets from this period often bear unmistakable gematric inscriptions. Who were the ancient Germanic masters of this art? The answer can hardly be anything other than: the magicians among the followers of the Oriental soldier religions. I have already shown (cf. § 5 and § 9) that the practitioners of the Dolichenus cult practiced gematria. They were so close to the Mithraic religion that it would be extremely strange if the adherents of this even more mystical religion had not been knowledgeable in the use of gematria.

In studying Cumont's addition to the actual collection of documents, the section "Pierres gravées et amulettes" (T&M. 2, p. 447 ff.), I have observed the following cases with (as far as I can see) typically gematric magical inscriptions:

ΑΒΑΛΝΠΘΠΝΛΑΒΑ — in the middle, thus $Θ = 8$, and on both sides of it the same row of letters, running from left to right. The third character from the beginning is not entirely clear, but can be determined without difficulty; since the inscription is a palindrome, it must be identical to the third character from the end ($α$). and to the right running to the left. The numerical value of this row, calculated according to the

special magical calculation method, is 1 (α) + 2 (β) + 1 (α) + 11 (λ) + 13 (ν) + 16 (π) = 44. The total sum of the inscription is thus = 44 + 8 + 44 = 96 = 24 × **4.** The number 4 should be the number of the quadrigans (the four-horse chariot = the four sacred elements). "According to Dion Chrysostome, the Magi of Asia Minor compared in their hymns the government of the world by the supreme god to the conduct of a chariot drawn by four horses, symbols of the four elements. It can be said that the Mithraic mystics attributed the same meaning to the quadriga of Sol, which was also interpreted as an emblem of the four seasons." Cumont, T&M. I, p. 126 (cf. ibid., p. 82 at the top). As I will show below, the Germanic wagon rune must have had the same numerical value. Furthermore, there is no doubt that the number 24 had a powerful magical value in Greek letter mysticism. As the highest of the letter values, it probably symbolized wealth, which fits well with the natural purpose of a lucky amulet. The rune for wealth (Icelandic *fé*) also has this number in my interpretation of the numerical values of the older runic alphabet. In the lower field of the oval, separated from the rest by a horizontal line, there is another inscription, which Cumont read as *TVΞEVI*. At first glance, it certainly looks as if this reading is beyond doubt. However, the stone is partially worn, and we must therefore assume that some lines have been erased. It is also conceivable that this is a reproduction of an older stone with partially worn writing. *Ξ* may be the remains of an *E* and *I* the remaining vertical line of a *T*. If this is the case, we once again have a palindrome before us, *TVEEVT*, and its numerical value is: 19 + 20 + 5 + 5 + 20 + 19 = 88 = 22 × **4.** Once again, we have the number of the quadrigans, this time combined with the number 22. In the older runic alphabet, the

rune whose name means inheritance has precisely this numerical value (cf. § 36). The entire inscription on the magic stone has the numerical value 184 = 46 × **4.** The writing is arranged according to the system 44 + 8 + 44 and 44 + 44. This cannot be a coincidence, as we are undoubtedly dealing with an amulet, which also has an image that unmistakably brings to mind the number 4.

2. As in no. 8 (II, p. 449 f.) , Cumont mentions a jasper stone with the inscription *KHNAO|ACAΓA* — that is, 5 + 5 letters with the numerical value 46 (10 + 7 + 13 + 1 + 15) + 24 (1 + 18 + 1 + 3 + 1) = 70 = 10 × **7,** the sacred number of Mithraism number *κατ′ ἐξοχήν* (cf. § 10 f.).

NEIXAPOΠΛHΞ, cf. the above image. Cumont strangely reads one letter too many here. Its numerical value is: 13 + 5 + 9 + 22 + 1 + 17 + 15 + 16 + 11 + 7 + 14 = 130 = 10 × **13.** Thus, it is a combination of two numbers, which in late antique Oriental magic are said to have been of great significance. The number 13 was the sacred number of the highest being in Mithraism. Cf. Reitzenstein, Das iranische Erlösungsmysterium, p. 155. A Manichaean text preserved in Chinese translation gives us an insight into the speculation behind this numerical symbol, cf. the same work, p. 154 — today's twelve hours, combined as a whole, mean thirteen, these thirteen are one day and one god. In later Persian speculation, 13 became the number of Zervan-Aions (cf. § 29, p. 82 above), (cf. 13 in the Dolichenus cult, see above § 5 and § 9). The number 10 plays a fundamental role in all late antique and early oriental magic and number speculation (cf. § 48, p. 152). The decade was considered fundamental, creative. The number ten may have been of central importance in love

magic. Cf. Magnus Olsen, Bergens Museums Aarbok 1909, no. 7, p. 35 ff. and 1914–15, no. 4, p. 14 ff. This fits well with a Mithraic amulet of probable erotic significance, as the numerically interpreted inscription is next to an image of Cupid and Psyche. No doubt the lost half also had an inscription, probably based on the same numerical principle. The amulet also has an inscription or fragment of an inscription on the other side. However, several letters are difficult to identify. I have attempted an interpretation, in which I believe I have identified gematria based on the number 7, but I consider it pointless to discuss this attempt here, as the reading is uncertain in so many respects.

H and *N* in *ΕΔΣΗΝ* (see fig. 6), monogram. This reduces the number of letters to 42 = 6 × **7.** Together with the stars, there are thus 49 = **7** × **7** characters. This is therefore a typical Mithraic numerological arrangement. Since we are clearly dealing with an amulet here, we should also expect gematria. In accordance with the reproduction, I read a letter when (*Ξ*, not *E* in the first word group) with Cumont, who omitted the group *ΕΛΚΟΝΦ* in his transcription: 1)*ΥΑΚΥΜΞ*The reproduction shows a clear *Ξ*. Perhaps Cumont interpreted this as an *E* to get a more pronounceable word, but it is more likely that a printing error crept into his transcription. = 87 + (20 + 11 + 10 + 20 + 12 + 14); 2) *ΕΛΚΗΦΙΔ* = 67 (5 + 11 + 10 + 7 + 21 + 9 + 4); 3) *ΕΛΚΟΝΦ* = 75 (5 + 11 + 10 + 15 + 13 + 21); 4) ELKONT = 73 (5 + 11 + 10 + 15 + 13 + 19); 5) ELKYNT = 78 (5 + 11 + + 10 + 20 + 13 + 19); 6) *ΕΔΣΗΝ* = 47 (5 + 4 + 18 + 7 + 13); 7) *ΛΕΚΝΛΔΥ* (the characters around the star above the lion's tail; Cumont reads the same characters but in a slightly different order) = 67 (4 + 5 + 10 + 13 + 11 + 4 + 20). The numerical value of the whole (87 + 67 +

75 + 73 + 78 + 47 + 67) is 494 = 38 × **13.** The sacred number of the Near Eastern sky god is thus included in the sum of the numerical values of the letters. This fits well with the image of the lion, the symbol of Ahura Mazda's pure light. It is also interesting to note that the image of the radiant sun on the other side of the amulet stone dedicated to Mithra has sixteen points. As mentioned above, the number of the month dedicated to Mithra was 16.

5. An agate (no. 13, II, p. 452, fig. 405) bears the inscription *ΜΕΙΘΡΑC* under a 16-pointed star (cf. above on the number 16) — that is, **7** letters (note *ει* for *ι*) with the numerical value 70 (12 + 5 + 9 + 8 + 17 + 1 + 18) = 10 × **7.** Read according to the Milesian system, the same inscription gives the sum of 365 (the great number of Mithras and the sun god, the ring of the year, cf. II, p. 19).

6. Finally, of particular interest is a gold ring of clearly magical character (no. 14, II, p. 452 f., fig. 406). On its inner side there is a series of inscriptions, among which the name of Mithras can be read. It is extremely difficult to determine the letter values with certainty, as the inscription is not divided into clearly separated groups. However, this is the case on the outer side. A snake divides it into eight arched fields. In six of these, Greek letters are engraved, here and there mixed with certain symbols, which may also be letters. At least four of these groups, those with unmistakable Greek script, can be deciphered: I. Under three stars it says: ΘΘΘΛΛΛ = 3 × 8 + 3 × 11 = 24 + 33 = 57 = 3 × **19** (a cosmic number, see below). II. Around a star is written: *ΝΕΑΠΟΛΕC* = 13 + 5 + 1 + 16 + 15 + 11 + 5 + 18 = 84 = 12 × **7.** III. In one of the fields damaged by a crack, the following

is clearly legible: ΠΟΑΝΛ (the last letter is Λ, not A, as Cumont interpreted it) = 16 + 15 + 1 + 13 + 11 = 56 = 8 × **7**. IV. In the next field, next to a small circle, we read: ΛΧΟ ΔΔΔ ΥΥΥ = 11 + 22 + 15 + 3 × 4 + 3 × 20 = 48 + 12 + 60 = 120 = 10 × **12** (the number of the zodiac signs). We have before us, by all accounts, an amulet with inscriptions arranged according to astrological numbers: the number 7 of the planets, the number 12 of the zodiac signs and their sum 19 (7 + 12), the number of man: according to astrological teachings, her soul had received its predispositions from the seven planets and her body was connected to the twelve signs of the zodiac. Cf. Cumont, Den astrala religionen i forntiden (The Astral Religion in Antiquity), p. 109. Cf. also § 33.

7. Among the stones with inscriptions, it remains only to mention the amulet described by Cumont as No. 12, with *ABPACAΞ* and *IAΩ* on one side and *MIΘPAΞ* (sic!) on the other. This can reasonably be regarded as non-Mithraic. Someone has combined on an amulet the name of the demon Ἀβράσαξ (Ἀβράξας), the Greek name of the Jewish god Ἰάω, and a distorted form of the name of Mithras. If letter magic is present here, it is probably Milesian (Ἀβράσαξ = 365) and falls outside the scope of this study.

15. The inscriptions on the Mithraic amulets have thus proved to be of a gematric nature throughout. In the inscriptions on the monuments, however, we have observed a simpler form of alphabetical mysticism: letter counting. It is conceivable, however, that in some cases regular gematria (letter weighing) was also used in the application of more important inscriptions on monuments and other official objects (e.g., coins). An

exhaustive investigation of this question cannot be provided at present, however, as Cumont does not consistently indicate the presence of letter-distinguishing signs in his text edition. Assuming that such signs are also absent in the original, we can expect to find gematria in inscription lines such as: SOLISACR = 91 = 13 × **7** (inscriptions nos. 105, 107, 422); SOLI S = 70 = 10 × **7** (inscription 109); DI MITHRAE = 84 = 12 × **7** etc. I have noted a number of other similar examples, but do not consider it worthwhile to expand the collection of evidence with cases where no verification is provided by reproductions. I therefore present below a few analogous inscriptions taken from the illustrative material in Cumont's work. The fact that these inscriptions with clear or, in some cases, perhaps only apparent gematria are so few in number is undoubtedly due to the fact that initial lines with strong abbreviations of the type IOM etc. were not usually used on the more interesting monuments in terms of sculpture, which were considered worthy of reproduction. Examples 1–3 are exceptions, however. The fourth is found on a coin and undoubtedly deserves greater interest; unfortunately, no other clearly Mithraic coin with a clearly legible inscription has been reproduced. **7.**

2. Fig. 177 (II, p. 316) has as its initial line INVICTO with seven letters and as the next line the name of the god MYTHRÆ with a peculiar spelling: Y for I, which indicates that there may be a hidden gematric intention. The numerical value of this line is also 84 = 12 × **7** (12 + 22 + 19 + 8 + 17 + 1 + 5), which, as I have previously pointed out, also has a special astrological significance.

3. Fig. 198 (II, p. 329) has as its initial row DIMC = 4 + 9 + 12 + 3 = 28 = 4 × **7.** The inscription (no. 371 in Cumont) means: *Deo Invicto Mithrae Caute.*

4. A coin from Cilicia (fig. 12, II, p. 190) bears the inscription *ΤΑΡΣΟΥΜ ΗΤΡΟΠΟΛ ΕΩϹ* on the reverse along the edge, i.e. *Τἀρσου μητροπόλεως,* but arranged so that two rows of letters with **7** characters in each are formed. In the middle, around an image of Mithras killing a bull, are the following five letters: *ΑΜΚΓΒ* (= *Ἀυτονόμου μητροπόλεως Κιλικίας γρἀμματι βουλῆς),* whose letter values are: 1 + 12 + 10 + 3 + 2 = 28 = 4 × **7.** The last two letters of the inscription are written below a line, also forming a number containing the number 7: 24 (ω) + 18 (σ) = 42 = 6 × **7.** On the front, we see an image of Gordianus III wearing a crown, of which seven points are visible, and on either side of the image are two *π* (= *πατὴρ πατρίδος*) = 16 + 16 (Mithras' special number). It seems to me beyond doubt that letter mysticism inspired the arrangement on this coin. The gematria of the five letters surrounding the image of Mithras may be a coincidence. One can only comment on this with any degree of certainty after having observed the same thing on a whole series of similar coins. Unfortunately, I do not have such comparative material at my disposal.

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CHAPTER II

THE NUMERICAL VALUES OF THE OLDER RUNE ALPHABET

16. Like the Greek alphabet of late antiquity, the older Samhrian rune alphabet consists of 24 characters:

ᚠᚢᚦᚨᚱᚲᚷᚹᚺᚾᛁᛃᛇᛈᛉᛊᛏᛒᛖᛗᛚᛜᛟᛞ

These letters, some of which vary greatly in type, are found on a series of objects whose age has been determined by archaeological research to be between approximately 200 and 700 AD. These older runes were regarded in later times as particularly magical, in contrast to the 16 characters of the younger runic alphabet. The inscriptions carved with these older runes can, to a large extent, be assumed to be of a magical nature. It is these linguistic monuments that I will focus on in this work, the purpose of which is to trace the mysticism of the runes and investigate its connection with the alphabet magic of late antiquity.

As I mentioned earlier (cf. § 1), research has already found a number of examples of the ancient North Germans using letter counting in their runic magic. However, most of the oldest runic monuments are predominantly amulet-like in character. In analogy with the conditions in the late Roman mystery religions (the cults of Mithras and Dolichenus), we should, however, expect the use of a more powerful magical aid if a genetic

connection exists: letter weighing, gematria in the proper sense. In order to determine the numerical values of the runes, we must know their order. The relationship with the correct order of the older runic alphabet has so far been regarded as an obvious fact. We have several objects with this runic alphabet, and the deviations are highly insignificant. Only in the 13th and 14th and 23rd and 24th places in the series do the inscriptions show a slight variation. One would therefore be inclined to assign the following numerical values within the so-called futhark: ᚠ = 1, ᚢ = 2, ᚦ = 3, ᚨ = 4, etc., and only feel uncertain about ᚲ and ᛃ, as well as ᛇ and ᛗ, as to whether 13 or 14, and 23 or 24, respectively, should be considered correct.

However, such an interpretation of the numerical values of the futhark does not provide any key to revealing a consistent gematria in the magical runic inscriptions. If one attempts to apply this system of calculation, one may certainly arrive at results here and there that can be interpreted as gematria, but no consistently satisfactory solution can be found in this way. We must ask ourselves: perhaps those knowledgeable in runes arranged the characters in the futhark in such a way that only the initiated could deduce the true numerical values. Unlike the alphabets of the Mediterranean countries, which were primarily borrowed from the East as a means of communication, the older runic alphabet with its 24 characters appears to have had a primarily magical purpose from the very beginning. This is indicated first and foremost by the names of the runes, which are clearly related to mythological or magical powers. However, if the runic alphabet was created for magical purposes, it is reasonable to assume that its actual (numerical) order was kept strictly secret. One or more characters could have been moved

when the futhark alphabet was created, so that the entire numerical sequence was disrupted. This could only have been achieved by moving one character or a certain number of characters from the end to the beginning of the row or vice versa. If we now seek a correspondence between the names of the runes and their numbers according to the futhark, we are wasting our time. We encounter nothing but contradictions, for if we start with the first letter of the futhark and look for such a connection, we find that ᚠ, Icelandic *fé* 'goods, wealth' (cf. Latin *pecunia*), a concept that implies multiplicity, would denote the lowest number 1; ᚦ, Icelandic *þurs* 'troll, demon', would represent the number 3, the divine number symbol in all Near Eastern and European mysticism; the rune ᚨ, Icelandic *áss* 'god', would, on the other hand, be associated with an even number, although the number 2 and often even its multiples are associated with the demonic in the same folklore. If there is a connection between the numbers of the runes and their names, there must clearly have been a rearrangement when they were organized into a futhark. The simplest and at the same time most radical change in this case would have been to move the last sign from the end of the series to the place before its beginning. Through such an operation, all even numbers take on the value of odd numbers and vice versa. A similar game of hide-and-seek is played, for example, in our ordinary card game, which, as is well known, still serves magical purposes today and was most likely originally used as a technical aid in divination. Certain circumstances seem to me to indicate that our usual card game has origins that can be traced back to the Mithraic milieu or, at any rate, to circles with an interest in mysticism in late Roman times, which were close to this Oriental soldier religion. In ancient times, the game may

have consisted of certain wooden pieces, which were later replaced by cards during the Middle Ages, although the design retained the essence of the once magical apparatus. The highest card is ranked thirteenth in relation to the others, just as 13 must have been the most important number in the Mithraic mysteries. The four "suits" probably represent the four elements: spades = earth, clubs = water, hearts = fire, diamonds = air (in India, air is symbolized by a star-shaped figure with six corners, cf. v. Glasenapp, Der Hinduismus, p. 56; cf. that diamonds are called *diamonds* in English). The spade symbol is reminiscent of the leaf-like Mithraic symbol mentioned by me in the previous chapter (§ 11, 3). An investigation of this question would certainly be of cultural and historical interest. I have only been able to make a few suggestions here: the ace looks like a one, but usually has a higher value than any of the other twelve cards. Let us now assume that a regrouping of the kind suggested has been undertaken in the runic sequence. By moving the runic letter *f* back to the end of the row, we obtain a completely different series of signs and numbers, beginning with ᚢ = 1 and ending with ᚠ = 24. A first glance at the thus altered runic row shows us that the above-mentioned contradictions between the names of the signs and their ordinal numbers have disappeared: ᚠ 'goods, wealth' now has the numerical value 24, the highest in the series, ᚦ 'fortune, troll' has the numerical value 2, the basic number of the demonic in magic and folklore. According to Plutarch, De Iside 48, the Magi called evil the duality. The belief in 2 as an unlucky number was particularly widespread among the Persians around 300 CE, as confirmed by the Talmud (see Scheftelowitz, Die altpersische Religion und das Judentum, p. 90). Cf. that even today in English the name for the two in card games, *deuce* (<

Old French *deus* '2'), also means 'devil' (the words are almost certainly identical in origin), and ᚲ 'god' has the numerical value 3, the divine and protective number against witchcraft in the same sphere of belief. It seems as if a single meaning could be found. It is likely that each sign in the runic series was named with reference to a mystical correspondence between names and ordinal numbers. The question now is whether all the runic names can be interpreted in this way. To get anywhere with this problem, we must turn to the environment in which the runic script originated. Where the written characters have been borrowed or reworked, the numerical symbolism has probably also been borrowed.

17. The runic script is most certainly a loan from the Roman Empire during the imperial period. Whether the Latin or Greek alphabet was the actual model for this script has not yet been definitively established by research. The Bugge-Friesen view sees the Greek alphabet as the main model. Holger Pedersen has recently strongly opposed this view and sought to derive all the runes from the Latin alphabet. I have attempted to take a middle position in my essay "Der Ursprung der Runenschrift und die Magie" (The Origin of Runic Writing and Magic), Arkiv f. nord. filol. 43, new series 39, p. 97 ff.; however, it is beyond doubt that the Germanic runic script was adopted from the late antique cultural world and that this script was carved on a number of preserved objects from the third century AD onwards. The mysticism associated with these ancient Germanic symbols, which were considered magical, was most likely also borrowed from the Roman Empire shortly before its decline. The origins of Germanic letter magic can therefore be found in the late antique mystery religions. First and foremost, we must consider

the cult of Mithras. Around the year 200 CE, this cult was at the height of its power. From shortly after the year 180, it was undoubtedly the most popular form of religion among the empire's officials and military personnel. At that time, the Roman army, officers, and soldiers consisted of a motley crowd of Western Romans, Near Easterners, and Germanic tribesmen. The emperor himself, Marcus Aurelius' brutal and extravagant son Commodus, who came to power in 180 and was assassinated in 192, had been initiated into the mysteries of Mithras. Judging by the ruins, the Roman camps along the northern border of the empire must have been teeming with monuments erected by Mithraists within the army. The oldest monument that can be dated with certainty has been found in Roman Germania and must be from around 148 AD. Two other monuments, also found near the German border, date from 189 and 213. At the beginning of the third century or slightly earlier, similar monuments were erected in Pannonia (certainly before 222). In Dacia and Moesia, the Roman provinces that bordered the Goths' domain on the Black Sea, the Roman cult of Mithras finally reached its zenith. We have every reason to believe that as early as around the year 200, there were numerous worshippers of "the unconquered god" in the Roman army camps in these regions. Moesia has a monument from the year 216, and Dacia has among its even more numerous monuments one that must have been erected sometime between 176 and 192. However, most of these ruins from the Roman Mithraic period cannot be dated more precisely. Cf. Cumont, T&M. 2, p. 540. A good summary of the ideas and historical development of Roman Mithraism is provided by Söderblom, Ur religionens historia, p.

229 ff. See also Martin P:n Nilsson, Den romerska kejsartiden 2, p. 397 ff., and Gillis P:son Wetter, Hellenismen, p. 86 ff..

However, what we know is enough to establish with certainty that the period of the first powerful upswing of the Mithraic religion in the border provinces of the Roman Empire immediately preceded the spread of runic writing among the Germanic peoples. Sometime, perhaps before, but more likely during or shortly after the reign of Commodus (180–192), the so-called older Germanic runic alphabet was probably completed, based on Greek and Latin letter types. The objects on which we find the oldest runic inscriptions have been dated by archaeologists to around 200 AD. At present, leading experts seem to favor a slightly later date. Shetelig, who originally dated the runic inscription on the spear from Øvre Stabu in Norway to around 200, stated a couple of years ago in a letter to Magnus Olsen (cf. Norges Indskrifter med de ældre Runer 3, p. 253 f., booklet printed in 1924): "I can only say in general that a purely archaeological dating is difficult to arrive at with certainty for such a small difference as 50 years — that is, in this case, whether we should say approx. 200 or approx. 260 AD." This concerns the runic find that has hitherto been considered the oldest. Almgren and B. Nerman, Die ältere Eisenzeit Gotlands, Stockholm 1923, p. 134, wish to move this date closer to the time of a number of other runic monuments that were previously considered to be considerably younger. "The weapon finds from Stabu must certainly be regarded as contemporary with the bulk of the finds from Vimose and dated accordingly. Montelius has dated the latter find to around 250, a date that seems to us to be a little too early for the following reasons." If the runic inscription was made around the year 200 by one or more of the

Germanic tribes who were then in Roman military service, it is quite possible that a weapon with runes of this type could have reached Norway within 50 years, or even much earlier, as we have ample evidence that Germanic migration movements began as early as the beginning of the Migration Period. 50 years, and quite possibly much earlier, a weapon with runes of this type could have reached Norway, especially since we have ample evidence that migratory movements had been affecting Norwegian conditions since the beginning of the third century. Cf. Shetelig, Norges forhistorie, p. 172.

18. In the first chapter of this work, we have learned a great deal about the curious world of late antiquity, filled with numerical symbolism and letter magic. If Germanic warriors came into contact with this world around the year 200 CE, it is highly probable that they first encountered this mystical movement in its Mithraic form. It should therefore be a completely natural assumption that the numbers that were sacred to certain divine powers and magically significant beings and things in the Mithraic cult served as a model for the creation of the numerical symbolism that determined the sequence of characters in the older runic alphabet. We have no reason to doubt that, in the Mithraic view, 2 was a demonic number and 3 a divine number. That 2 was regarded as a demonic number according to Persian belief is known from direct testimony (cf. above, p. 55, note 2). This was also the case in late antique mysticism (e.g., for Proclus): "For the Dyas causes the soul to care for humans, and the Trias causes it to turn to the gods," Zeller, Geschichte der alten Philosophie 3, 2, p. 636, note 7 to p. 635. The Mithraic religion has been criticized for its developed demonology, and sacrifices were made to appease the powers of

the abyss (T&M. 1, p. 296). The divine significance of the number three in Mithraism is evident in the figures depicted on a number of monuments. On these we usually see three figures: the central figure of Mithra and on either side two smaller figures, two torchbearers of equal height, whose attire and appearance are completely identical to the god figure in the middle. Compare the depiction of the three-headed Odin ("High," "Equal," and "Third") in Gylfaginning 2. These three clearly symbolize the power of light in the morning, at noon, and in the evening. It is the triune Mithra, Μίθρας τριπλάσιος, as he is once mentioned. Cf. Dieterich, Kleine Schriften, p. 261. Furthermore, Heaven, Earth, and the Ocean appear to have formed another holy triad within the Mithraic doctrine, just as Anu, the sky, Bel, the earth, and Ea, the ocean, formed a fundamental triad of deities among the Chaldeans (T&M. 1, p. 295, note 3). The numerical values I have assigned to the runes ᚦ 'turs' (= 2) and ᚬ 'ås, god' (= 3) may thus very well have been borrowed from the Mithraic environment. Through the testimony of amulets and mystical inscriptions, we have found it clearly proven or brought to a high degree of probability that in Roman Mithraism, the number 16 was dedicated to Mithra, who in the Avestan-Persian lunar calendar had the 16th day consecrated to him, and that the number 15 was assigned to his companion and alter ego, the Sun (cf. § 12). With which of their own gods could the ancient Germans, who had gained insight into the Mithraic mysteries, have identified the central deity of this religion? As through the so-called "interpretatio Germana" in the borrowing of the names of the days of the week — when Jupiter, the god of marriage, became Thor and Mercury, the leader of the dead, became Odin — the Roman god of war and

victory, Mars, was identified with TyJfr Thursday < *dies Jovis,* Wednesday < *dies Mercurii,* Tuesday < *dies Martis.*, elsewhere and at a slightly later date, the Mithraic god of victory, *deus invictus,* Mithra, as the undefeated god of battle, have emerged as a deity of the same kind as the ancient Germanic god of war. In the futhark, the Ty rune ↑, which the Edda calls the victory rune, has the number 17 and the sun rune ↳ has the number 16. If, as I have assumed above, the futhark is a masked alphabet, where � has been moved from its original position at the end and placed as the first sign in the row, we must assign a number to all the runes except ⊬, which is 1 less than its order number in the futhark row. According to this rule, the number of the victory rune should have been 17 - 1 = 16, the sacred number of the victory god Mithras. The number of the sun rune was thus 16 - 1 = 15, the number of the sun among the Mithraists. This mystical numerical correspondence is striking. When we come to the end of our investigation, we shall see that the correspondence between the runic row numbers and the numerical symbolism of Mithraism is consistent throughout. Broadly speaking, all the runic numbers correspond to what we can establish with certainty, or at least with a high or fairly high degree of probability, as the numerical mysticism of the Mithraic religion.

19. After rearranging the Futhark row into what I believe to be the correct order of the characters, the rune ᚾ should be the first character in the alphabet. Its numerical value is thus 1. The name of the rune in Anglo-Saxon runic poetry is *úr,* which means 'uroxe'. In Nordic runic verses, the sign is called *úr,* meaning 'slag' or 'shower'. The latter meanings are undoubtedly secondary. We have every reason to assume that the creator of the runic alphabet primarily chose names with the most concrete

and visual meanings possible, unless in some special case magical considerations dictated a different choice. The meaning 'uroxe', in earlier times probably 'bull', leads our thoughts straight to the cult of Mithras. On almost all the great stone monuments, Mithras is depicted in a scene showing him killing the primeval bull. The myth of the defeat and killing of this bull and the manifold consequences thereof for existence as a whole has clearly been fundamental to this ancient Asian religion. From this myth ultimately arose the custom of a sacred meal with miraculous power, which in the Mithraic mysteries corresponded to the Christian sacrament of the Eucharist. Gillis P:son Wetter, in his short introductory work Hellenismen (in the book series Natur och Kultur), says the following about this sacred meal, which is depicted in several sculptures, where the myster sometimes seems to occupy the places held by Mithra and the Sun in other depictions: "Here it cannot, or at least not exclusively, be a question of the bull through whose life force Mithra once created the world, the cosmos, the origin of life. These ideas have clearly been interpreted symbolically, individualized. The bull still represents the force of life. But it is now thought to be present in the drink and food that the mystics partake of in the sacred meal. What was once thought to give life and strength to vegetation is now associated with individual people. It is the forces of life, which they now partake of, and which Mithra, through his act of salvation, has placed at their disposal, that will one day save the faithful from destruction and death in the great world catastrophe that the ancient Persians expected to be the end of the world. The powers of darkness seek to prevent them from working and to destroy them, just as the powers of light seek to support them. It is probably because of

these sacramental meals that Christians say that the devil, in order to deceive the faithful, imitated the Christian Last Supper in the Mithraic mysteries: he celebrates the sacrifice of bread (*celebrat panis oblationem*) and introduces an image of the resurrection (*et imaginem resurrectionis inducit*). (ibid., p. 92). I leave this detailed quotation to enable a full understanding of the magic that we shall see later associated with the rune ᚢ and its number, which must have been 1. We know that the bull defeated and slaughtered by Mithra was the first creature created by Ahura Mazda, from whose flesh and blood everything else in creation arose. The Iranian myth is quite reminiscent of the Old Norse mythological story of the cow Audhumla. An even closer parallel can be found in ancient Indian mythology, cf. Rigveda 4, 11, 1 (see Vodskov, Sjæledyrkelse og Naturdyrkelse 1, p. 316). —- The beginning of the day, dawn, is depicted in the Avesta as a bull (cf. yasna 46, 3 and 50, 3). In Rigveda (10, 3, 2) the *kŗṣṇā ēṇī* 'the black hind' is mentioned. (cf. T&M. 1, p. 186). What could be more natural than that in Mithra mysticism the number 1 symbolized the bull, the first in the creation of the world? If the older runic row is arranged according to the numerical symbolism of the Mithraic doctrine, it must have begun with the urox rune. In the following (cf. especially § 63 and § 67, paras. 5–8 and 26–31), examples will be given of how the so-called prime numbers (numbers that can only be divided evenly by 1) were considered by the ancient Norse to have a helpful and protective power, primarily against witchcraft, since 2, the number of the demonic, cannot break such number combinations.

20. Continuing with the sequence of symbols in the ancient Germanic runic alphabet, the rune ᚦ must, as I have already

pointed out, have the numerical value 2 and the rune ᚲ the numerical value 3. The numerical value 4 should therefore be assigned to the following rune ᚱ, whose name in the Anglo-Saxon rune song is *rád*, which has been interpreted as meaning 'riding'. Its Old Norse name is *reið*, a word that can also mean 'wagon'. We have every reason to assume that this more concrete meaning was the original one. In that case, we have a new striking correspondence with Mithraic numerical symbolism. The chariot κατ' ἐξοχήν was for Mithras myster quadrigan, the four-horse chariot, whose sacred number must have been 4; I recall the interpretation I gave to a Mithraic amulet with a four-horse chariot, where the inscription shows gematria with the number 4 (cf. above § 14, 1). In Norse mythology, 4 is Thor's sacred number. Four loaves of bread were sacrificed to him in his sanctuary in Trondheim; in Thor's hall there were 640, i.e. $10 \times 4 \times 4 \times 4$, rooms. Cf. R. M. Meyer, Altgermanische Religionsgeschichte, p. 288 f.; Chantepie de la Saussaye, The Religion of the Teutons, p. 238; Mogk, Germanische Mythologie, p. 128; Främmande religionsurkunder 3, p. 301. He is also mentioned as the "chariot god," *Reiðartýr*, in Old Norse mythical poetry. The gold ring found in Pietroassa, which was clearly an offering to Thor, shows gematria with the number 4 (cf. § 67, 25), as does the Tjurköbrakteaten (cf. § 67, 4), which, judging by the inscription, was a gift from a returning mercenary who probably had Thor-Hercules as his patron god. Galdrar built on Torstalet are discussed in chapter 3 (§ 40, 4, § 41, 5, and § 43, 1). In Þrymskviða, where Tor has to endure a difficult adventure with the Turs, the number $8 = 2 \times 4$ is mentioned repeatedly, i.e., the number of the Turs combined with that of

Tor. The stolen hammer is hidden "eight miles deep," "nothing for Fröja in eight days," etc.

21. A considerably more difficult task confronts us when it comes to finding the symbol that could be the basis for the following *k* rune, the sign ‹, which has been given its place here and should therefore have the numerical value **5**. In Anglo-Saxon runic songs, this rune is called *cén,* which means 'torch' (literally 'fat fir'). In Icelandic, however, the corresponding sign is called kaun, meaning 'boil'. In the Old Germanic dialect spoken by the creator of the runic alphabet, the word chosen as the name for this rune cannot have had the same meaning as in Icelandic. The more aesthetic meaning that the word has in Anglo-Saxon was probably present in the language of the runic writer. The Old Norse name differs completely from all other runic names; "among the runic names, it is the only designation for a human disadvantage," says Bugge, Norges tidskrifter, Indl. p. 123. The torch also appears in every depiction of the bull-slaying Mithra. As I have already mentioned, he has a torch-bearing figure on either side of him, dressed and looking like the central figure. One torch-bearer is seen raising his torch, the other lowering his. They are mentioned on the monuments: the former as *Cautes,* the latter as *Cautopates* (names of uncertain origin). If the names of the runes originate from the mystery cult of Mithras, the rune which in the Anglo-Saxon rune song has a name meaning torch must be connected with the name and numerical symbol of one of these torch-bearing deities. It is therefore necessary to investigate with which numbers these two divine beings were associated in the numerical symbolism of the Mithraic mysteries. As already pointed out in the previous chapter, this was largely based on astrological speculation. This means that in many cases

where there is no direct indication of the role of a number in this mystery religion in late antique sources, we can nevertheless conclude with some, sometimes quite high, probability the connection between this number and what it symbolized. Like other astral religions, Mithraism worshipped the seven planetary spheres. The highest, the seventh, belonged to Mithra and his companion the Sun, the sixth to the Moon, the fifth to Mars, and so on (the order was the reverse of the late antique days of the week, cf. T&M. 1, p. 118 f.). The number 7 was therefore significant for Mithra and the Sun, 6 for the Moon, 5 for Mars, 4 for Mercury, and so on. From certain late antique sources, it is known that in the city of Edessa during the Roman Empire, alongside Baal = Helios, two child deities, Aziz and Monimos, were worshipped. who were identified by astrologers as the former with Mars and Phosphoros, and the latter with Mercury and Hesperos (cf. T&M. 1, p. 209, note 7). Such identifications of different celestial bodies with other astral deities are known to us from ancient Babylonian astrology. In the case in question, Cumont, albeit with some hesitation (cf. T&M. 1, p. 207, note 3), has sought to see a counterpart to Mithra and the so-called Dadophori (torchbearers), both of which unmistakably recall Phosphoros and Hesperos. I find it by no means unlikely that the Edessa religion and the Mithraic doctrine in this case had a genetically dependent correspondence in the mythological system. Due to the syncretistic tendencies of the time, striking similarities often arose even within religions that were not directly or closely related to each other. Corresponding to Cautes, the torchbearer, Aziz-Phosphoros, he should have been identified in the astral system of the Mithraic mysteries with the planet Mars or thought of as its companion and thus belonging

to its sphere, just as Mithra belonged to the sphere of the sun. On a number of monuments erected by Roman legionaries, Cautes is invoked alone, a circumstance which indicates that this torchbearer was an important deity for men who served in the military. It should therefore be assumed that he had a certain connection with the planet of the god of war. As I mentioned above, the sphere of Mars was the fifth. This explains the numerical value of the torch rune, 5. The similarity between the initial syllables of Cautes and an ancient Germanic *kaunaz* may be purely coincidental. However, it may have played a role in the choice of the rune name. It is easy to imagine that the ancient Germanic legionaries distorted the foreign name through folk etymology. I mention this only as a suggestion; the decisive factor was, of course, the meaning.

The idea of five as a magic number, protecting against danger, probably spread westward from the Near East. This would provide a natural explanation for a remarkable superstition widespread in the Mediterranean countries. In Italy, as is well known, the hand with its five fingers plays an immense role in warding off harmful magical influences (*iettatura*). In Moroccan superstition, both the five fingers and the number five have a powerful apotropaic power. "If a Moroccan believes he is in danger of being harmed by another person's evil gaze and does not consider himself bound by any courtesy, he extends the fingers of his right hand toward the other person's eyes and says: *Hamsa fi 'ainek* (or, in Schelha, *semmus gudálnenik*), "five in your eye." Or he performs the same gesture first with his right hand and then with his left, adding the words *hamsa u hmîsa fi 'ainek,* in which the diminutive *hmisa,* "little five," represents the fingers of the left hand. According to the people themselves, this is

meant to reflect the harmful power of the eye back onto the person looking at him; but it is possible that he also thinks he is poking out the evil eye with his outstretched fingers," writes Westermarck in the interesting chapter 'The Evil Eye' in his account 'Six Years in Morocco' (p. 216). He also provides reproductions of a number of amulets, whose figures form the magically protective number five. This belief in the protective power of the number five, like so many other magical beliefs, probably spread from the Near East. On the "evil eye" in Mesopotamia, see Campbell Thompson, Semitic Magic, p. 88. A basic rule of magic is that evil must be driven away with evil. Like protects like. The image of an eye can protect against the influence of the evil eye and is therefore often found on amulets (cf. fig. 1). A glance from the evil eye was an attack. To ward this off, people hastened to utter or gesture the number 5, the numerical symbol of the god of war and the harmful planet. The color of this planet was red. Ancient astrologers called Mars Pyroëis (the fiery one), cf. Boll, Sternglaube und Sterndeutung[3], p. 49. It is therefore interesting that this particular color plays a role in apotropaic magic, as the following example from Near Eastern magic shows: According to Anquetil-Duperron's testimony, evil spirits were driven out of the houses of the Parsis (close relatives of the Mithraists) by a ceremony in which a mobed (priest) gave each person an amulet with a sign written in red ink on a piece of deer skin, which had first been exposed to fire and in which five different kinds of things had been placed. The horns of domestic animals were also to be painted red on this day. See Scheftelowitz, Die altpersische Religion und das Judentum, p. 82.

Finally, as regards the connection between Phosphoros, the god of the morning dawn, and the planet Mars, it is possible that this is due to mystical speculation. Since ancient times, the hand has probably been a symbol of the divinity of the dawn, *Ροδοδάκτυλος Ήως,* cf. Wilke, Die Religion der Indogermanen in archäologischer Betrachtung, p. 142 ff. (Mannus-Bibliothek No. 31). Cautes' upward-pointing torch clearly symbolized the dawn, and the sacred number of this mythical figure may well have been 5 already in pre-Indo-European times, long before the planet Mars was assigned the fifth sphere of the heavens in Near Eastern astral speculation. The rune ⟨ is followed in the runic row by the sign Ⅹ, which usually represents a fricative *g* sound. In Anglo-Saxon runic poetry, this rune is called *gifu* (*gyfu, geofu*), which is identical to the word *gifu* (five), meaning 'gift'. According to the explanatory principle followed here, this rune should be assigned the numerical value **6.** The number six as a symbol for 'gift, offering' probably has a very old tradition among the Aryan peoples, judging by the Rigveda, cf. Vodskov, Sjæledyrkelse og Naturdyrkelse 1, p. 116, where the sacrificial fire is called 'the one who, without moving from his place, brings six burdens'. In the cult of Mazdaism, which must have developed quite closely from the same source as the cult of Mithras, sacrificial bread was used according to the rules of the ritual in numbers of four or six. It is likely that 6 was an ancient sacred number in sacrifices. Six sacrifices were offered in China, "six things worthy of worship," usually in the form of six plates of semi-precious stones, which served both as symbols of the deities and as precious offerings to them. People have sought to recognize in this the sky, the earth, and the four cardinal directions. Cf. Söderblom, Gudstrons

uppkomst, p. 217 f. This ancient Chinese sacrificial ritual may well be related to a mysticism of numbers that existed among the ancestors of the Asian peoples. The sacrificial bread of the ancient Persians was called *darun,* meaning 'gift', a word identical in meaning to the Anglo-Saxon *gifu.* Darmesteter says of this ancient Persian sacrificial bread (cf. T&M. 1, p. 321, note 3): "Le *darun,* petit pain non levé, rond, un peu plus grand qu'une pièce de cinq francs. Il y en a quatre ou six suivant l'office... deux sont marqués de neufmarques en trois rangées parallèles." We know from reliefs on its monuments that similar sacrificial bread was used in the Mithraic cult. Fig. 9 shows Mithra and the Sun God at a ritual meal. On a small table next to the larger one, at which the two deities are seated, lie four loaves of bread marked with the sign of the cross.

It is an interesting but difficult task to determine which Germanic deity was symbolized by the *g* rune. As I will show below, there are several indications that the number of this rune, 6, was symbolic of Njord (cf. § 41, 6). He was, as is well known, the god of wealth and good harvests. The number 6 also seems to have been associated with the moon (cf. § 40, 6). In an essay entitled "En nordisk gudagestalt i ny belysning genom ortnamn" (A Nordic deity in a new light through place names) (Antikvarisk tidskrift 20, no. 4), Hjalmar Lindroth has attempted to interpret Ull and Skade as symbolizing the waxing and waning light of the moon. Far more consistent with known Norse mythology is to see Njord and SkadeThis name is compiled by Lindroth, op. cit., p. 51, in accordance with older opinion, from Gr. σκοτος 'darkness'; Hellquist, Etym. ordbok, p. 723, assumes (with Brate et al.) a connection with Gothic *skadus* m. 'shadow' etc. as representatives of these opposites in the

mystical spectacle of the moon. Njord has been thought of as the giving power, Skade as the taking power. That Njord rules over the wind (Gylfaginning 22) is also consistent with the character of the moon god Njord's relationship to the sea and seafaring in Norse mythology, which can be explained quite naturally if we see him as an original moon god and not a "Terra mater" who, within her ancient Scandinavian cult area, had to change gender. The Greek goddess Artemis was believed by islanders to rule over the weather and wind, ebb and flow, and primitive peoples associated the moon and the wind, e.g., the Indians on the northwest coast of America: the man in the moon is a friend of the wind. Cf. Wilke, Die Religion der Indogermanen, pp. 152 f. and 159.

As for the relationship between the Norse Njord and Tacitus' goddess Nerthus, see most recently Magnus Olsen, Ættegård og helligdom, p. 249 ff. (Germania 40), I assume that these are in fact two etymologically distinct words: 1. Tacitus' *Nerthus* (f.) corresponds to Icelandic *niarð-*, an intensifying prefix (*niarðgiǫrð* 'belt of strength' etc.), Irish *nert* 'strength'. Cf. Stokes in Fick, Vgl. Wörterbuch[4] 2, p. 193. (cf. our folk belief in the 'power' of grain and bread). Nerthus was a goddess of earth and fertility. On a certain day (presumably in the spring), according to popular belief, "the goddess appeared in the sanctuary." The priest then accompanied a covered wagon in which a human representative of a god and one of the goddess were imprisoned. Between them, a marriage ceremony (*ἱερὸς γάμος*) was celebrated, after which the male partner and the priest's male assistants, who were undoubtedly slaves, were killed. — 2. An interesting etymological interpretation of the name *Niǫrðr*, proposed half a century ago by Schweizer-Sidler, has recently

been taken up and further developed by Franz Rolf Schröder. Cf. Schröder, Germanentum und Hellenismus, p. 51 ff. The word corresponds, except for the final sound, to the Old Indian *nrtúh* 'dancer'. To Schröder's detailed argument, I would like to add the observation that in Snorri's Edda, Njord is described as the owner of the most beautiful legs among the Aesir, even more beautiful than Balder's. This fits well as a remnant of an original characteristic of a dance god. Many primitive peoples perform ritual dances at the appearance of the new moon. Cf. Wilke, Die Religion der Indogermanen in archäologischer Betrachtung, p. 6 and p. 233 with note 1, and in Sweden there is a custom of bowing to the new moon and greeting the "New King," who brings wealth and fertility. Cf. Hyltén-Cavallius, Wärend och Wirdarne 1, p. 302.

23. The name of the *w* rune ᚹ is written by the Anglo-Saxons as *uyn, wyn, wen*. The word means 'joy, pleasure'. This name is in all likelihood the original or very close to it. We have no knowledge of the Old Norse name, as the rune does not appear in the younger runic alphabet. The Icelandic name for the letter *v* in Latin script, *vend*, is a loan from Anglo-Saxon (cf. Bugge, Norges Indskrifter, Indl., p. 59). The Gothic name *uuinne* = *winja* means 'grazing place (νομή)' = 'the place where livestock are comfortable' (cf. Feist, Etymologisches Wörterbuch der gotischen Sprache[2], p. 431). The Germanic root is related to Old Norse *vánati* 'to desire, to love', Latin *venus* 'lust', etc. Here there seems to be a transition from an original abstract meaning to a concrete one, or the original word may have been replaced by a suffix-extended form. The numerical value of the rune ᚹ, No. 8 in the futhark, should, according to the explanatory principle followed here, be **7.** This fits very well with what we know for

certain about the numerical symbolism of the Mithraic mysteries; as we have learned above, 7 was the favorite number of this mystery religion. As I have previously emphasized, it was not specifically dedicated to Mithra, but primarily referred to the seventh sphere of the world, the goal of the mystic's striving toward divine elevation. The number 7 thus symbolized roughly what in Christian terminology could be called the kingdom of bliss or the antechamber of heaven. The rune name thus fits well with the Mithraic view.

24. The name of the *h* rune ᚺ is *hægl* (*haegil, hegel*) in Anglo-Saxon runic poetry, a word meaning 'hail' in Anglo-Saxon. The Old Icelandic and Old Norse name for the h-rune is hagall. In the Norwegian rune poem, its name is treated as a masculine word, but is explained as meaning 'hail', which in Old Norse (hagl) was neuter. This name cannot easily be considered original in its documented meaning. However, the word that now means 'hail' in the Nordic languages most likely originally meant 'stone', probably synonymous with 'crystalline stone' (we still often say *hagelsten* instead of *hagel* and *hagelkorn*, and in Old Swedish the word *haghlsten* is attested with the meaning 'hailstone'). Cf. Hellquist, Etym. ordbok, p. 220. The Persians and, after them, the Mithraists undoubtedly inherited from their ancestors a belief, common among many primitive peoples, that the sky was made of stone (crystalline stone). The Avestan word for 'stone' *asman* occurs in several places in the sacred writings with the meaning 'heaven'. Cf. Bartholomae, Altiran. Wörterbuch, p. 208. In the Avesta, *Asman,* the religiously worshipped firmament, is closely associated with Mithra (cf. T&M. 1, p. 160). If the sphere of the Sun and Mithras was the seventh, then the sphere of Asman, the fixed stars, must have

been regarded as the eighth: "En joignant à ceux des planètes le ciel des étoiles fixes, on arrivait au total de huit. De là le caractère sacré de l'ogdoade," says Cumont (cf. T&M. 1, p. 120, note 2). If the rune name *hagall* (*hægl*) is identical in origin to Mithraism's *Asman,* then rune magic must also have taken its sacred number from there, which was undoubtedly 8. If we begin the numerical value series of the runic alphabet with the *u* rune, the *h* rune, number 9 in the futhark, occupies the eighth place in the actual order, and its number should therefore be **8.25.** In the Anglo-Saxon runic tradition, the *n* rune ᚾ *nyd* (*naed*) is mentioned. This word is clearly identical to ags. *níed, néd* (English) and *nyd* (West Saxon), which means 'need, necessity'. This corresponds phonetically and semasiologically to the Old Icelandic and Old Norse rune name *nauðr* (fem.), later *nauð,* meaning 'need, necessity'. The Germanic noun is formed from the Indo-European root **neu-* 'to press' (cf. Torp in Fick, Vgl. Wörterbuch[4] 3, p. 298). This name corresponds strikingly with the late antique Mithraic religion's Ananke, the god of necessity and fate (cf. T&M. 1, p. 86 with note 10 and p. 152). Since its arrival in the Roman Empire, the syncretistic teachings of the Mithraists have obviously, along with much else, adopted this originally abstract divinity from the talmystic branch of Greek philosophy. The same is true of the Sethian mystery religion originating in Egypt, cf. Wünsch, Sethianische Verfluchungstafeln aus Rom, p. 94 ff. We know that Pythagoras already taught that Ananke surrounded the entire universe: "Πνθαγόρας Ἀνάγκην ἔφη περικετσθαι τῷ κόσμῳ" (Aetios 1, 25, 2). The doctrine of Ananke was further developed by Plato (cf. The Republic 10, 616 ff.): the transmigration of souls is subject to the power of Ananke, and souls must appear before

her throne as soon as they have chosen a new life. According to Proclus, the Mithraic Ananke was identical with the ether (Αἰϑήρ), and the Orphics seem to have identified a so-called divine power with the night (Νύξ)Cf. Eisler, Weltenmantel und Himmelszelt, p. 415 and p. 651, note 16.. If Ananke, the ultimate foundation of all things, is thought to envelop the universe with its eight spheres, it must itself be located in a supernatural ninth space (the ether, the night). In that case (by analogy with what we know about the seventh and assume about the eighth), its sacred number must have been **9,** which is precisely the numerical value that the rune with the same name, no. 10 in the futhark (Old Norse *nauðr* = Greek ἀνάγκη), receives in accordance with the *upark* theory developed here. The same place is occupied by *nauðr* in Odin's magic songs in the Edda (see § 40, 9 below). As a strangely protective magic rune, *nauðr* is also mentioned in Sigrdrífomál (str. 7). The number nine is the most important magical number in the Edda poems: Odin hung in the sacrificial tree for nine nights before he found the runes, Valhalla had 540 = 60 × 9 gates. Cf. Schröder, Germanentum und Hellenismus, p. 15 ff. The number has been brought to the North from a Germanic people who did not count with the large hundred (= 120). Groa sings nine magic songs, after nine nights Gerd promises to meet Frö, etc. Further examples can be found under *neun* in Hoops' Reallexikon. In relation to Odin, we often find the number 18 = 2 × 9, which is discussed in more detail in § 32. As the god of runic knowledge and sorcery, Odin was represented to some extent by the number 9, although his runic number (as we shall see) was 18, a multiple of the former, which must have been a potent symbol of the power of the gods over everything (9 = 3 × 3). According to

various sources, the major religious festivals in the Nordic region (in Uppsala and Lejre) were adapted to the number nine in terms of their annual recurrence and the number of sacrifices. See most recently Wessén, Studier till Sveriges hedna mytologi och fornhistoria, pp. 187–194. That the magical number of the runes *κατ᾽ ἐξοχήν* was 9 is still reflected in a Danish folk song (Grundtvig, Danm. Folkev. i Udv., 1882, p. 315):

Nætter ni og Dage ni sad hun på jordfaste Sten til hun finge sendt den Kongens Søn sine runer igen.

We have the same testimony from Swedish folklore: whoever steals Odin's rune staff can see nine cubits down into the earth. Cf. Hyltén-Cavallius, Wärend och Wirdarne 1, p. 223. The magical power of the number 9 is also attested by late folk medicine, where "nine kinds of herbs" are an effective remedy. Cf. Reichborn-Kjennerud, Maal og Minne, 1923, p. 49. In Near Eastern and European magic, 9 is universally the most powerful number, the one used in spells that are not directed at any specific power. As I mentioned in the previous chapter, it can be described as the number of miracles. A selection of the countless examples of the magical use of the number 9 may be of interest here: The lovesick maiden in Virgil's poem tries to attract Daphnis from the city by tying three knots on three different colored strings. A Jew is said to have bewitched the prophet Muhammad by tying nine knots on a string. Pliny recounts that some people believed they could cure pain in the groin by taking thread from a spider's web, tying seven or nine knots in it, and attaching it to the patient's groin. In Russia, nine strands of yarn tied around a child's neck are believed to protect against scarlet fever. Cf. Frazer, The Golden Bough, p. 288 f. During the sacred

upanayana ceremony in India, the boy wraps the sacred girdle, which has one, three, and five (i.e., nine) knots, three times around his waist. To ward off evil spirits, Parsis use nine willow branches and nine hairs from a stallion, nine from a male camel, nine from a bull, and nine from a ram. In Persian purification ceremonies, nine holes were made in the ground (cf. Scheftelowitz, Die altpersische Religion und das Judentum, p. 5, p. 83, and p. 89). Regarding the latter case, one should recall the nine sacrificial pits, the so-called elf mills, in the North. In ancient times, we can recall the number nine as the number of pontiffs and augurs, etc. (cf. Dieterich, Kleine Schriften, p. 351, note 3, cf. also p. 353). That the number nine played a role in Mithraic magic can be seen, for example, in the inscription on the ring described in § 14, 6. The signs are arranged here in groups of nine: *ΘΘΘΛΛΛ* + 3 stars (= 9 signs); *ΝΕΑΠΟΛΕΣ* + 1 star (= 9 signs); *ΛΧΟΔΔΔΥΥΥ* (= 9 signs). The Mithraic or Mithraism-influenced magicians of late antiquity undoubtedly turned to Ananke, the power that in late antique mysticism was considered to be the cause of everything (cf. above), in their ceremonies. It is likely that the creator of the runic alphabet borrowed not only the name of the rune ᛉ from this environment (fornisl. *nauðr* = Ananke) but also the sign itself. On the Mithra monuments there is a similar magical figure of unquestionably astral-mystical origin. For more on this, see my aforementioned essay in Arkiv f. nord. filol. 43, new series 39, p. 106 f. (cf. also the stars on the aforementioned magic ring). From a Greek text (T&M. 1, p. 357), we also know that the cross sign was used by the followers of Mithras to drive away demons. This obviously has nothing to do with the Christian cross. Rather, we must assume a connection with the Babylonian ideogram for 'god', a

six-pointed star (which over time lost a crossbar). It is easy to imagine that a Mithraic magician would have accompanied the incantation word *Ananke* (= it must happen) with a cross sign. The creator of the runic alphabet probably found this easily carved symbol (a cross with a slanted side arm) better suited to the requirements of runic writing than the Greek-Roman letter 'n'. He may also have seen greater magical power in it and therefore included it in the mystical alphabet of 24 runes, which he probably created using an older alphabet with fewer runic characters (19 to 20), which, following the Latin model, had already come into use among the Germanic peoples a generation or two earlier and was used for writing on wood. See the essay mentioned in the previous note.

Finally, as regards 9 as a magic number, this is undoubtedly not entirely a legacy from late antiquity. The belief in this number as having magical powers was undoubtedly inherited by the ancient Germans from their Indo-European ancestors (cf. Neckel, Altgermanische Kultur, p. 98, and Clemen, Religionsgeschichte Europas 1, p. 222). Only the name of the rune symbol for this number is a clear borrowing; the symbolic meaning of the number, on the other hand, must be something ancient. We need only recall the nine stones in the stone circles from the pre-Iron Age, the nine sacrificial pits, the so-called elf mills, which are probably even older, to understand this. The Germanic peoples were certainly not completely devoid of number mysticism before their encounter with late antique mysticism.

26. The rune **ᛁ**, which in the futhark follows the *n* rune and thus should have had the numerical value **10,** presents a rather

tricky problem. As the name for the *i* rune, Anglo-Saxon, Norse, and Gothic traditions all have a word meaning 'ice', a name which at first glance seems to be due to the difficulty of finding a suitable word among the few that begin with the *i* sound in Germanic. However, if we turn to Greek-Oriental linguistic speculation in late antiquity, we learn that the number tenSee Reitzenstein, Das iranische Erlösungsmysterium, p. 160. was considered to be *ψυχογόνος*, i.e. 'soul-forming'. However, the Greek *ψυχή* 'soul' (due to, among other things, its similarity in sound) was associated with the etymologically related adjective *ψυχρός* 'moist cold'. Even before Plato, a distinction was probably made between two forces in the human spirit: one fiery and warm = *ὁ θυμός,* the other moist and cold = *ἡ ψυχή.* The former was considered to strive upward toward the ether, while the latter tended to sink down to the moist mother Earth (cf. Eisler, Weltenmantel und Himmelszelt, p. 557). The Rune name meaning 'ice' can therefore be thought of as a symbol of the magical power of cold. As will be shown in the next chapter, the magic of the Edda songs provides evidence that the spell-knowing Northmen attributed power to the number ten to subdue souls that had left their bodies (hamnar) to travel around in the air at night—the so-called "tunrids," mentioned in the tenth of Odin's magic songs (cf. § 40, 10). We also find examples of the "killing" power of the number ten in magic poetry and runic magic (cf. § 45, 3 and § 61). That the number ten and numbers containing it (multiples thereof) are unlucky must have been a common Aryan belief, if not an even older one. In modern India, all numbers ending in zero are considered unlucky, which is why, for example, strings of pearls usually have

an uneven number of pearls. Cf. v. Glasenapp, Der Hinduismus, p. 372.

27. The rune ᛃ, originally the sign for the *j* sound, follows the *i* rune in the magical runic sequence as in the futhark, and should therefore be assigned the numerical value **11**. Its Anglo-Saxon name is *géar* 'year'. This corresponds perfectly to the Old Norse name *ár* 'year', which presupposes a common Norse **jära,* whose *j*, like the other *j* in unstressed syllables, was lost in the sixth century (after which the sign began to be used as a vowel sign). This rune has clearly been a symbol of fertility in Old Germanic letter magic. The fertility god Frö is mentioned as *árguð* in Old Norse, and in several runic inscriptions the rune ᛃ, used as a reward rune, has the meaning 'year, annual growth' (cf. § 56 and § 64). The fact that the number 11 is considered auspicious for fertility is evident in the magical practices of many peoples. Hyltén-Cavallius recounts from northern Småland (cf. Wärend and Wirdarne 1, p. 386): "When the old woman puts the hen on the eggs, she takes care to place a horseshoe nail among the eggs and say:

'I am laying my hen on eleven eggs; I am placing my foot against the fifth wall. Ten hens and one rooster!' She believes that in this way she will have many hens in her brood." — If it were simply a question of there being more hens than roosters, it could just as well have been called 'ten eggs' and "nine hens and one rooster." The number eleven probably has a special meaning, inherited from a long-gone era. Here we can recall the eleven apples that Skirne offers Gerd from Frö (árguð), cf. Skirnismál, str. 19. Magnus Olsen has suggested the reading *ellilyf* = 'remedy for old age' (cf. Festskrift til Torp, p. 116). However, both

manuscripts have *ellifu* = 11, which may well be the original, as the Edda poems are full of mystical allusions to numbers. In a series of counting rhymes collected by H. F. Feilberg, Tallene i folkets brug og tro, Dania 2, p. 185 ff., we find that 11 is unusually often associated with female animals, women, or weddings: "eleven goats in the mountains," 'eleven thousand virgins,' 'eleven girls who have been deceived,' 'eleven ladies dancing,' 'eleven truies,' "eleven held at my wedding." The legend of Ursula and the 11,000 virgins probably goes back to ancient Germanic beliefs in terms of number mysticism. Ursula most likely continues a pre-Christian fertility goddess (*Nehalennia*), and in many parts of Germany, *'Urschelberg'* is said after Ursula in place of *'Venusberg'* Jfr Güntert, Kalypso, p. 97.. Perhaps an ancient numerical mystical observation forms the basis for the perception of the number 11 as symbolic of fertility and annual growth. A solar year (365 days) exceeds a lunar year (354 days = 12 × 29½) by exactly eleven days. For a real year to come to an end, 11 days must pass over the old lunar year. These 11 days were therefore believed to exert a magical influence on the growth of the year. Or perhaps this mystical belief dates back to a time when the zodiac had only eleven constellations (cf. Boll, Sternglaube und Sterndeutung[3], p. 7). That the number 11 was considered symbolic of fertility by the Mithraists cannot be directly proven. Their god of fertility was Kronos-Saturnus, with the epithet Frugifer. However, it is quite likely that this was the case, as among the Iranians' sister people, the Aryan Indians, the number 11 appears in religious ceremonies which were probably or are still clearly associated with fertility rites: at the full moon sacrifice, a cake on eleven small bowls was brought to Agni-Soma. Cf. Vodskov, Sjæledyrkelse og Naturdyrkelse 1, p. 435. On

the connection between Soma and the moon and the significance of this celestial body for fertility, cf. Wilke, Die Religion der Indogermanen, p. 145 ff., 155 ff.,

and even today, on the eleventh day of the month of Phālguna (February–March), the people of northern India pour a drink offering over the roots of the sacred tree Emblica officinalis while praying for fertility for women, herds, and crops. Cf. Frazer, The Golden Bough, p. 147. We have already seen that the number 11 played a role in late antique letter magic (cf. the Saturnalia incantation formula discussed in § 3, 8, which, by all accounts, was directed at a person's fertility).

28. The rune that has denoted the *p* sound is difficult to determine in several respects: there has been dispute about its original appearance (it was replaced early on by the *b* rune), and there is uncertainty as to its exact place in the oldest runic alphabet. It may have followed the *j* rune, as on the ancient Kylverstenen (cf. § 49), or it may have had its proper place only after the phonetically mysterious sign ⌇ as is the case on the Vadstenabrakteaten and on the Charnayspännet. The latter possibility is supported by the greater number of runic inscriptions (the Thames knife also shows a similar arrangement, cf. § 51). Leading researchers have also generally designated the *p* rune as No. 14 in the futhark (Bugge et al.). However, this does not necessarily mean that the Kylverstenen, which shows an arrangement of the futhark without distinguishing marks between the three so-called families, cannot represent a more primitive stage. The order of the three amulets, which differs from that of the Kylverstenen—including the Themsen knife, a miniature sword, which may perhaps be regarded as such—may

well be due to an additional magical device. The question is, after all, which rune is most appropriate for the thirteenth position. It is conceivable that at a later date it was decided that the magical power would be enhanced if the rune whose magical number was 13 was also given this place in the futhark. When discussing the rune sign ↲ (§ 29), this hypothesis becomes more likely. The numerical relationships in certain Galder-like poems and a gematric calculation of the few magical inscriptions containing this sign or the *þ* rune will further support this hypothesis. We thus have to assign the number **12,** not **13,** to the *þ* rune (? on the Kylverstenen and |^J on the Charnayspännet) as its numerical value, based on evidence that can only be hinted at for the time being, which would have been its number if we had followed the grouping of signs on the amulet-like runic memorials. Regarding the original name of the rune, we are again faced with a dilemma. The Anglo-Saxon rune song mentions the p-rune as peorð, but what this means, the partially defective poem allows us only to guess. It is highly probable that the Anglo-Saxon word is somehow related to a Celtic word (Cymric *perth* 'bush, hedge', etc.), cf. Pedersen, Aarbøger, 1923, p. 61, but this does not rule out the possibility that an older name, which was no longer properly understood in Britain, may have been transformed. According to the Salzburg manuscript, the Gothic name for the rune is *pertra*, a word whose meaning cannot be explained from purely Germanic word material. Old Germanic had few native words with a final *þ* (which, as is well known, is due to the fact that in the Indo-European proto-language, a *b* in this position was quite rare). Everything suggests that whoever arranged the older runic alphabet had to choose a non-Germanic word as a rune name when it came to the *þ* sign. Anyone familiar with the

Mithraic cult in the Roman Empire need not be uncertain about the sacred name, which in the nomenclature of this religion unmistakably recalls the Gothic rune name *pertra*. It should of course be *petra* (*genetrix*) = '(the giving birth) rock'. Mithra is mentioned in the inscriptions *ὁ θεὸς ἐκ πέτρας,* the god born from the rock (cf. T&M. 1, p. 159 f.). The legend of the god's strange birth probably arose from the Persian Mazdeism, which taught that Mithra was born from the fixed stars, which since primitive Indo-European times were considered to be made of stone (cf. § 24 on *Asman*). Later, *Terra mater* probably corresponded to *Speñta-Armaiti* in the Avesta (cf. T&M. 1, p. 133 f. and p. 138). The Mithraic cult of the imperial period took over the worship of Mother Earth from Armenia and Cappadocia. In the latter country, according to reliable evidence, the twelfth month of the year was dedicated to this deity (cf. T&M. 1, p. 107, note 8 and p. 138). In a mithraeum in Dormagen, twelve stone balls have been found in the same place (cf. T&M. 2, p. 388). This number undoubtedly had symbolic significance. It has been suggested that they represent the twelve months of the year. In my opinion, it is more likely that these twelve stones were sacred to the Mithraists as symbols of the divinity of the earth, *Terra mater*. Ultimately, this number may be based on the twelve constellations of the zodiac, from which Mithra was born (cf. fig. 10). "One is led to believe that Mithra, born from the stone, is the personification of the light that bursts forth at dawn from the place where the dome of the sky seems to rest on the heights that close the horizon," says Cumont, T&M. 1, p. 160. One of the twelve constellations of the zodiac must always be located on the horizon, and it was probably originally thought that Mithra emerged from one of these into existence.

Later, the myth of his birth from the rock developed. I therefore believe that there are good reasons to consider the *þ* rune to be symbolic of the magical powers of the earth. This is also confirmed by the magic of numbers in the Edda songs (Odin's *twelfth* magic song, cf. § 40, 12) and by Anglo-Saxon galder poems (cf. § 44, 3). One of the pieces of advice given to Loddfavne in Hávamál also teaches that earth neutralizes the effects of drink:

"When you drink beer, call on the powers of the earth!"

And to the same poem is added a later addition: "Earth cures beer intoxication." Cf. Åkerblom, Den äldre Eddan 1, p. 61 and p. 61, note 1, where the folk remedy for intoxication, smelling earth, is mentioned. This is undoubtedly based on an old magical and natural philosophical theory. "For the air spirits (souls), it is death to become water, for water, it is death to become earth," says Heraclitus Diels, Die Fragmente der Vorsokratiker[4] 1, p. 85, no. 36 (cf. Eisler, Weltenmantel und Himmelszelt, p. 489). The effect of a drink, the wet element, should thus be neutralized by the forces of the dry element, i.e., the earth. Regarding this view in folk medicine, I. Reichborn-Kjennerud has provided an instructive explanationMaal og Minne, 1923, p. 4 ff.. This belief, widespread among the ancient Germanic peoples, in the magical power of the earth to cure the effects of drunkenness may shed light on the mysterious and hitherto unexplained role of the rune *peorð* in the Anglo-Saxon rune song: *(Peorð) biþ symbleplega and hleahtor wlancum ...,þǽr wigan sittaþ on béorselebliþe ætsomne*

= "*Peorð* is always fun and games for proud men ..., where warriors sit in the beer hall, merry together." It has been suggested that *peorð* was the name of a merry dance. A much

more natural explanation is offered by the assumption that the men sitting at the drinking table used to joke about the *þ* rune and what runic magic prescribed for successful drinking. Cf. *Puetra!* in a spell against hiccups, Ohrt, Danmarks Trylleformler 2, p. 35. Perhaps an onomatopoeic transformation of the name of the p-rune?

29. An equally perplexing problem is presented by the rune that follows the *þ* rune on the Kylverstenen, but immediately precedes it on the alphabet amulets (Vadstenabrakteaten, etc.), the sign 1 (h). This rune seems to have been very little used even in the early days of the older futhark. It has generally been assumed that its phonetic value was somewhere between an *e* and an *i* sound, but there have been scholars who have questioned whether this rune was ever a sound symbol at all. Wimmer, Die Runenschrift, p. 135. Judging by Anglo-Saxon runic songs, this rune had a name meaning 'yew tree': *(Eoh) biþ útanunsméþe tréow, heard, hrúsan fæst,hyrde fýres, wyrtrumum underwreded,wynan on éþle*

= "*Eoh* is outwardly an unhappy tree, hard, earthbound, guardian of fire, supported at the bottom by roots, a joy on inherited ground." Among the Germanic peoples, yew has been a sacred tree since ancient times. See Hoops, Reallexikon under *Eibe.*. It is likely that the large sacrificial tree at the pagan temple in Uppsala was just such a tree. See Läffler, De svenska landsmålen, 1911, p. 646 ff. "Of all the means that the ancient Germanic peoples used to protect themselves against witchcraft, the yew tree was one of the most effective, and therefore they always carried a small twig or piece of the trunk close to their bodies," says a work on the significance of plants in folklore.

Henriksson, Växterna i de gamlas föreställningar, seder och bruk (Plants in the beliefs, customs, and practices of the ancients), p. 55 (this work contains a great deal of interesting information, partly taken from an unpublished medieval manuscript; unfortunately, the source is not indicated in each specific case). Cf. also Gessmann, Die Pflanze im Zauberglauben, p. 33. The yew tree, which in northern countries today (e.g. in England) is a typical cemetery tree, seems to have taken over the role of symbol of death, or rather life after death, from the cypress of the Mediterranean countries. There is a clear similarity between the two tree species. Among the ancient Greeks and Romans, the cypress was sacred to the gods of the underworld and was referred to as the "gloomy" tree. For the Persians, the cypress was the most sacred tree of all. It has been mysteriously associated with their worship of light and revered as a symbol of the pure light of Ormuzd (Ahura Mazda). On ancient Persian tombstones, the cypress is often depicted together with a lion, also a symbol of light (cf. Philpot, The Sacred Tree, pp. 39 and 13). According to what monuments tell us, the cypress was one of the sacred symbols of the Mithraic cult during the Roman Empire (cf. T&M. 1, p. 195 f.). "It is probable that the evergreen conifer, with its fabulous longevity, whose wood was considered incorruptible, and to which a significance not only religious but also funerary was attached, had become a symbol of immortality," says Cumont (T&M. 1, p. 196). Perhaps the Persians adopted the idea of the cypress as a symbol of immortality from the Assyrian-Babylonian view. "A cypress is a king, my lord, who gives life to many people," a priest said to Ashurbanipal (cf. Alte Orient XII, 12, 2, p. 24). If the cypress was a symbol of Ahura Mazda (Ormuzd) in Mithraism, as in the

religion's country of origin, Persia, it may also have been used as a symbol of this deity's sacred number. In the Mithraic religion, the Hellenic Zeus merged with Ahura Mazda, the Persian sky god. He is mentioned in one of the hymns of the Avesta (yasht 17, 16): "Ahura Mazda, the greatest, the best among the gods" (cf. Jupiter optimus maximus, § 9 ff.). On Mithraic monuments, this late antique deity often also bears the name *Caelus*, and has thus been understood as a personification of the divine sky (cf. T&M. 1, p. 137). Herodotus' account of the religious beliefs of the ancient Persians (book 1, chapter 131) shows that they worshipped Ormuzd, i.e. Ahura Mazda, as "the entire circumference of the heavens" (*τὸν κύκλον πάντα τοῦ οὐρανοῦ Δία καλέοντες,* says Herodotus; he already identified Zeus with Ahura Mazda). The Persian supreme god was thus the twelve constellations + the unifying element therein: according to astral mysticism, the sacred number of the deity must therefore have been **13.** There can be little doubt that the "Jupiter optimus maximus" of the Dolichenus cult and the Jupiter-Caelus of the Mithraists, who is also called Zeus-Oromazdes in an inscription, both derive their origin from the Near Eastern deity worshipped by the Persians as Ahura Mazda. The former should, as I have previously pointed out, be identical with *ὁ τρισκαιδέκατος θεός,* the thirteenth god. The letter-mystical inscriptions of the Dolichenus cult confirm this highly probable assumption (cf. § 5 and § 9 above). This mythological comparison leads us to the same conclusion as the astral-mystical speculation mentioned above: the number of gods must have been 13. The mystical view behind the sanctity of the number 13 may certainly seem absurd to modern man. Nevertheless, it has a whole series of well-established parallels in the mythological thinking of antiquity (cf.

Weinreich, Lykische Zwölfgötter-Reliefs (Sitzungsb. der Heidelberger Ak. der Wissenschaften, 1913) and the same author, Triskaidekadische Studien (Religionsgeschichtliche Versuche und Vorarbeiten, 1916)). And within a religion that in many ways continues the Mithraic view, namely Manichaeism, we find exactly the same way of thinking. "Twelve hours and actual members together make thirteen (the whole), and these thirteen are one day and one God," says Reitzenstein in explanation of a doctrine in a Manichaean text preserved in Chinese, Das iranische Erlösungsmysterium, p. 154. On the number 13, see also the same work, pp. 155 f., pp. 161 f., pp. 224 f. and pp. 229. Among the Manicheans, the number 13 was certainly the sacred number of Aion-Zervan. However, this does not mean that this was already the case in the Mithraic religion. The Manichaeans' Aion was probably a fusion of characteristics of the ancient Persian Zervan (infinite time) and Ahura Mazda. Among the late antique Mithraists, as in the related cult of Dolichenus, the "rounded" number twelve (= 13) was probably the symbolic representation of a modified Zeus (Jupiter-Caelus). One of the emblems of this Mithraic god of light and heaven was, as mentioned above, the cypress tree. For the Germanic peoples of the north, the yew tree must have seemed the closest equivalent to this southern tree. It is therefore fitting that Bugge and other runologists have given the name *iwaz to the rune with the numerical value 13. Regarding the original model for this rune, I refer to my essay in Arkiv f. nordisk filol. 43, new series 39, p. 105 f. The sign no. 13? (variant ↓ is most easily explained from a Latin Z. I assume that, like the following sign, it got its name from its sound and denoted a voiced s sound (z). Utharkrunan no. 14 probably denoted a voiced š sound (ž),

which first appeared after the *i* vowel. Later, these sounds merged and finally, in the north, *ř* (probably pronounced roughly as in Czech) changed to an *r* sound. At a very early stage, ? became a superfluous sign and was therefore replaced by ᛉ with the meaning 'yew'. We have seen above that the number 13 played an important role in the late Roman soldier religions (§§ 5 and 9, etc.). A gematric analysis of a series of magical runic inscriptions will show later that the number 13 also had a central meaning in ancient Germanic alphabet magic. That this number also had a significant meaning in Germanic religion in recent times is evident from the fact that Iceland had 13 thing sites and 39, i.e. 3 × 13 temples (cf. Chantepie de la Saussaye, The Religion of The Teutons, p. 360). Our modern aversion to the number 13, a superstition that is particularly prevalent among peoples of Germanic origin, is probably due in large part to the magical power of this number in ancient Germanic and Near Eastern religious mysticism. It was probably imbued with magical power and thus became taboo for the common people. (Christian beliefs probably played a secondary and late role.)

From a religious-historical point of view, it is of considerable interest to ask which ancient Germanic deity may have been identified with the Mithraic Zeus-Oromazdes as a result of "interpretatio Germana." It cannot have been Odin, the storm god who burst forth on Sleipne, whose sacred number was 18 (cf. § 32) and who, as a god of sorcery, was also associated with the number 9, which is included in 18. Nor can it have been Ty, who at the time of the emergence of runic writing and the borrowing of the names of the days of the week from the Romans was the god of battle and victory and was therefore assigned the number 16 (cf. § 18 above). A Germanic counterpart to Zeus-

Oromazdes can therefore only be found in Ull, who, judging by a number of place names, was once widely worshipped in the north and probably once occupied a central position in the ancient Germanic pantheon. Cf. Magnus Olsen, Ættegård og helligdom, p. 119 f. and p. 260. His name alone, which is undoubtedly related to the Gothic *wulþus* 'glory' (originally probably 'splendor'), suggests that he was a god of light. It seems highly probable that the name Ull goes back to one of the names of the Indo-European sky god, Ty, in another form (Old Norse *týr*, gen. *tivar* = Latin *divus*, Greek δτος, etc.). The god Ull can also be associated in a very natural way with the yew rune. According to Grímnismál, his dwelling was called Ýdalir = 'the yew valleys':

"Ydalen is Ull's home; there he founded his farm." Åkerblom, Den äldre Eddan 1, p. 79. Unless I specifically indicate the source below, quotations from Edda poems are taken from Åkerblom's interpretation.

We can therefore see no doubt that the yew tree is his symbol, just as the cypress is that of Ahura Mazda. The same Edda poem contains a statement that suggests that the god Ull once held a leading position in the Germanic pantheon:

"Ull's grace *he* possesses, and all the gods who first quell the flames. For the worlds open to the gaze of the gods when the flames are lifted from the fire."

The verse is obscure. It probably contains, as Åkerblom has suggested, cf. op. cit., part 1, p. 84, note 7, "a reference to sacrificial meals and to the great power that sacrifices had to connect the human world with the gods." What is interesting in

this context is that Ull is mentioned first among the gods. The same is true at the beginning of the poem, for after Ydalen, Ull's dwelling, and Alvhem, Frös' home, are mentioned, it is said: "At a third dwelling place," etc. Thus, Ull's dwelling is the first. I conclude from this that the stanza about Trudhem, Thor's dwelling, was inserted before the original beginning of an old account of twelve divine dwellings arranged in a circle. Another interpretation (that Ull and Frö had the same dwelling) is given by Schröder, Germanentum und Hellenismus, p. 29 f. Regarding this part of Grímnismál and its connection to late antique astrology, I have an interpretation that I intend to publish in the near future. Trudhem, Thor's dwelling, is the constellation Hercules, which lies next to the zodiac ("*ásom ok álfom nær*," Grímnismál, str. 4). In Atlakviða, there is mention of an oath sworn:

"by the sun, lowered toward the south, by the high mountain of Sigtys, by the ring consecrated to Ull."

The last line has been interpreted as referring to the altar ring that had its place in the pagan court (temple). Cf. Åkerblom, Den äldre Eddan 2, p. 161, note 3. In the preceding passage, however, it refers to powerful natural objects, the southern sun and the mountain of the god of battle, so one may wonder whether the third line also refers to something cosmic. Ull's ring may be the zodiac. As in all likelihood an astral deity (his name probably originally meant 'glory', 'the shining one', cf. above) he must have had his home in the most remarkable region of the starry world, the belt of the zodiac, among whose twelve constellations he owned one as his actual home and ruled over the whole, thus being the first and the thirteenth. The similarity

with Ahura Mazda would then be striking. Finally, we have Saxo's statement that Ollerus, i.e. Ull, once took Odin's place (cf. Jørgen Olrik, Sakses Danesaga[2], 1, p. 160 and note 2 ("before the rise of Odin worship, he seems to have been the supreme god among these peoples"). The Finnish mythologist Kaarle Krohn, in Scandinavian Mythology, p. 70, also assumes that the worship of the god Ull preceded the worship of the gods whose images were erected in the Uppsala temple at the end of the Viking Age (Odin, Thor, and Frö). There are thus strong reasons to believe that Ull was once the foremost of the gods worshipped in the North. He must have had the same cultic significance for the close relatives of the Northmen in the regions bordering the Roman Empire at the end of the second century AD (the Goths, etc.). According to Snorri (Gylfaginning 30), Ull was thought of as an outstanding archer. The best bows were made from yew wood. This characteristic of his as an archer may well be something original. In the mythology of many peoples, light deities are depicted as possessing bows and arrows (cf. Apollo in antiquity). The thirteenth month in the Avestan-Persian lunar calendar was dedicated to a star deity named *Tïshtrya* (*Tïr*), who is called *Τειρο* on Bactrian coins and depicted with a bow and arrow (Persian *tïr* meant 'arrow', cf. Cumont, T&M. 1, p. 136). It is highly probable that the Germanic warriors in the Roman army camps saw in this deity a counterpart to Ull. See most recently Ivar Lindquist, Namn och bygd 14, p. 82 ff.

30. After the runes ᚺ and ᚾ, the futhark contains the sign ᛦ, whose sound value may originally have been a trilled sound, which, over a sound similar to the Czech *ř* (ʀ in the usual transcription of runologists), has changed to the trill *r* (cf. above p. 82, note 1). Such a toning hissing sound never occurred in Old

Germanic at the beginning of a word. It is therefore beyond doubt in this case that the name of the sign was chosen with regard to the sound it contains. It has been assumed that the Old Germanic name for this rune was *alʒiʀ and that it meant 'elk' (cf. Wimmer, Die Runenschrift, p. 133, and Bugge, Norges Indskrifter, Indl., p. 82). In Nordic folklore, however, the elk is an animal that never seems to have been attributed any special magical significance. It is also unknown in more southern fauna. Of course, one could imagine that the moose, being more familiar to northerners, replaced a similar southern European ungulate, such as the red deer, but even in this case, there is no connection to late antique or Near Eastern animal symbolism. A correct solution to the mystery of this rune's name can therefore hardly be found other than by assuming that a phonetically similar name with a completely different meaning was the original. It is not difficult to find one with an unmistakable religious-magical meaning. Tacitus confirms that among the East Germanic peoples shortly before the end of the first century AD, a divine pair of brothers was worshipped. "Among the Naharwals there is a grove associated with an ancient form of god worship. This is presided over by a priest dressed in female garb, but the gods of the place are said, in Roman paraphrase, to be Castor and Pollux," says Tacitus (Germania, chap. 43). Cf. Hammarstedt's interpretation, p. 88, who states that the Germanic name of the divine pair was "*Alcis*." The religious historian Heim has wanted to see in this a Germanic plural *Alkīz*. Cf. Helm, Altgermanische Religionsgeschichte 1, p. 322. However, the Latin *c* may have been a sound substitution for an ancient Germanic fricative guttural sound, χ‹h. The Germanic word can then be linked to Gothic *alhs* 'sanctuary', Latvian *elks*

'idol' and the Anglo-Saxon verb *ealȝian* 'to protect' (cf. Feist, Etym. Wörterbuch der gotischen Sprache[2], p. 27). ○*Alhīz* (later **Alhīž*) could then most appropriately be interpreted as meaning 'protectors' (an *h* sound is also found in the Anglo-Saxon name for the rune: *eolhx*). This meaning fits well with the general Indo-European concept of two light deities, perceived as twins and regarded as benefactors of mankind. "They grant them food, wealth, happiness, and fame, heal all kinds of illnesses, and stand by those in distress and danger, especially in shipwrecks," says Wilke (Die Religion der Indogermanen in archäologischer Betrachtung, p. 191). The Dioscuri of antiquity, the Aces of the Vedic hymns (cf. Oldenberg, Die Religion des Veda[2], p. 214), and the ancient Germanic pair of brothers can certainly be traced back to an ancient Indo-European myth of astral origin. The Dioscuri played a prominent role in Mithraism during the imperial period. Just as Mithra is accompanied by the two Dadophori (torchbearers), the supreme god Saturn-Zervan is depicted on monuments with a Dioscurus on either side (cf. Cumont, T&M. 1, p. 85; part 2, fig. 320). We do not know what significance the Mithraic cult attached to these Dioscuri. Neither literary sources nor sculptural monuments give us any direct clues. According to Mithraic belief, however, the two Dioscuri represented the two hemispheres (cf. T&M. 1, p. 85 and p. 300 f.). Just as Ahura Mazda, according to Persian belief, had the entire zodiac under his control and was identified with it (cf. § 29), each of the Dioscuri is thought to have had half of it under his control, i.e., six constellations. This is supported by the fact that Cautes' symbol was the Bull and Cautopates' was the Scorpion. In ancient astrology, these constellations marked the beginning of the first and second halves of the zodiac (cf. T&M.

1, p. 210). If we now apply the same numerological approach as in the case of Zeus-Oromazdes' sacred numbers (cf. § 29), we get 6 + 1 = 7. The combined number of the Dioscuri should thus have been 7 + 7 = 14. This number corresponds to the number that the rune ᛦ must have, if the first sign of the runic row, as I have assumed, was ᚼ; no. 15 in the futhark then becomes no. **14** in the uthark. As will be shown below (cf. § 40, 14), Odin's fourteenth magic song in the Edda seems to refer to the zodiac, the domain of the two twin deities. It is interesting to note that in the Rigveda, the number 7 is often mentioned in connection with the Açvins, the ancient Indian equivalent of the Dioscuri of antiquity, the precursors of today and helpers of mankind in times of need and oppression: they are said to own seven stables, and their chariot is described as traveling over seven rivers. Cf. Vodskov, Sjæledyrkelse og Naturdyrkelse 1, p. 490. On the Aṣvins as healers and restorers of health, cf. L. v. Schroeder, Indiens Literatur und Cultur, p. 54 f.. In the preceding section, I have pointed out several similarities between ancient Indian and ancient Iranian numerical symbols; it is to be expected that these should have been quite numerous, since the two Aryan peoples were very close to each other in ancient times and, even earlier, formed an ethnological and linguistic unit. However, I must mention that the number 7 occurs so often in ancient Indian religious poetry that no absolutely certain conclusion can be drawn in this case. The possibility (not to say probability) of a connection also exists in this case.

31. I have already discussed the runes with the order numbers 16 and 17 in the futhark, ᚼ and ᛏ, and determined their numerical values as **15** and **16,** the consecutive numbers of the Sun and Mithras in the Mithraic lunar calendar (cf. § 18 above).

The numerical value of the *b* rune ᛒ that follows in the futhark row should therefore be **17**. The name of this rune was *beorc* (*berc*) among the Anglo-Saxons, which means 'birch'. This corresponds closely to the name in the Norwegian rune poem, where this rune is said to be: "ᛒ (i.e. *bjarkan*) *er laufgrønstr lima*", translated by WimmerDie Runenschrift, p. 279 as "Birkenzweig ist das laubgrünste Reis" (The birch branch is the greenest of the leaves). The Icelandic runic poem refers to "*laufgað lim ok lítit tré*," but in Latin it is explained as *abies* (which is clearly due to a misunderstanding, as the Norwegian text refers to a deciduous tree). Since the birch has had great magical significance and plays an important role in still living folklore, we have no reason whatsoever to assume any violent change in the original name. This probably meant 'birch' or 'birch branch'. In Northern Europe, birch and birch twigs are among the most common aids in fertility magic. MannhardtDer Baumkultus, p. 278, reports on a harvest custom among the Russians in the Smolensk region: "The last sheaf, decorated in the form of a woman with clothes, is carried by two girls to the manor house, where, in the presence of the congratulated lord of the manor, it is beaten by all the reapers with a birch broom, in the belief that this will destroy the animals that are harmful to the crops." And Frazer tells of Russian peasants who, on the Thursday before Pentecost, "go out into the woods, sing songs, make garlands, and cut down a young birch tree, which they dress in women's clothing." Cf. Frazer, The Golden Bough, p. 151 and the whole of chapter 10; further Mannhardt, Der Baumkultus, pp. 160, 173, 256, 265, 313 (and several other places, see the book's index, p. 621). Similar customs exist among many other European peoples. A detailed description of such a ceremony from 1636 is given in German

translation by Mansikka, Die Religion der Ostslaven 1, p. 236 ff. In Lithuania and parts of Germany, it is customary at Easter or Pentecost to beat each other; women are particularly vulnerable to such treatment. The weapon used is usually a birch branch with newly sprouted leaves (cf. Mannhardt, Der Baumkultus, p. 261). An even more pronounced nature-mystical feature has been preserved in northern Scandinavian folklore: in Ostrobothnia, it is believed in some cases that the soul of a deceased woman is "bound" to a birch tree and "lives" in it (cf. Krohn, Skandinavisk mytologi, p. 42). The magical connection between women and birch trees is also very clearly evident in Latvian folklore. See Winter, Archiv für Religionswissenschaft 2, p. 1 ff. (especially p. 26). In Icelandic skaldic poetry, albeit fairly late, there are hints that the rune *bjarkan* was considered to be connected with the female sex. Cf. R. M. Meyer, Altgermanische Religionsgeschichte, p. 489. This is entirely consistent with the mystical folk customs mentioned above, where the belief in a magical connection between women and birch trees is so clearly expressed. The ancient Germanic magical use of birch twigs (often hazel twigs as well) undoubtedly had its closest counterpart in the ancient peoples' "May wreath." Cf. M. P. Nilsson in Chantepie de la Saussaye's Lehrbuch der Religionsgeschichte[4] 2, p. 292 f.. In the Mithraic religion, a magical staff or bundle of twigs was undoubtedly used in religious rites, and there was certainly an equivalent to the *baresman* of the Avestan religion (cf. T&M. 1, pp. 16, note 9; 227, note 11; 238; 325). Unfortunately, we do not know what kind of plants this bundle of twigs was made of. Cf. Bartholomae, Altiranisches Wörterbuch, p. 948. However, it is not too bold an assumption that the Germanic peoples who lived

in the Roman army camps must have associated the Mithraists' use of this bundle of twigs with their own use of young leafy rice. The Mithraists' magical bundle of twigs must, however, like the Avestan religion's *baresman*Jfr Chantepie de la Saussaye, Lehrbuch der Religionsgeschichte[4] 2, p. 237. have been a symbol of Sraosha, who was closely associated with Mithra and is explained as "he who first stretched out the sacrificial branch" (*baresman*)Jfr Chantepie de la Saussaye, Lehrbuch der Religionsgeschichte[4] 2, p. 224.. The peculiar thing is that the seventeenth day of the Avestan-Persian lunar calendar was dedicated to this deity. Regarding the Avestan-Persian lunar calendar, cf. Darmesteter, Le Zend-Avesta 1, p. 34 f. and p. 142 f.. If the numbers of the sun rune and the victory rune are borrowed from the late antique Mithraic monthly calendar originating in Persia, it is highly plausible that other higher rune numbers were also determined with reference to the order of Mithraic deities in the monthly calendar. It is clear that the Germanic interpretation does not always offer a satisfactory parallel to the Mithraic view. The reinterpretation of Roman gods as Germanic gods was, as is well known, merely based on certain more prominent similarities. As far as Sraosha is concerned, according to the Avestan doctrine, he does not seem to have been a fertility god in his true essence. The only thing that is remarkable in this regard is the peculiar dialogue between him and the female evil spirit Druǰ: the demonic Druǰ tells the questioning god about her four different pregnancies (cf. Darmesteter, op. cit., p. 247 ff.). It is therefore conceivable that in ancient Persia, Sraosha was invoked at some ceremony with sacrificial offerings for good and world-promoting fertility (Sraosha is mentioned as "the pure, the beautiful, the victorious,

the world-promoting") (cf. Chantepie de la Saussaye, Lehrbuch der Religionsgeschichte[4] 2, p. In ancient Indian mysticism, 17 was the sacred number of Prajāpatis, the god of fertility. Cf. Oldenberg, Die Religion des Veda[2], p. 415, note 3, and regarding the religious-philosophical reason for this number (16 + 1 in complete analogy with 12 + 1, see above § 29), cf. Deussen, Allgemeine Geschichte der Philosophie[2] 1; 1, p. 191. However, the correspondence with the number of the birch crown, which is significant for fertility, may be purely coincidental. In this case, it is hardly possible to find a link between ancient Persian and ancient Indian number mysticism. According to one source, in ancient times the birch was sacred to Frigg (cf. J. Henriksson, Växterna i de gamlas föreställningar, p. 10 (cf. above p. 80, note 3)). As we shall see below, this fits perfectly with the number mysticism in certain galdrar and magical runic inscriptions, which can undoubtedly or with the greatest probability be determined as having a meaning specifically related to the female gender (cf. § 40, 17, § 44, 4, § 45, 2, § 67, 22-3).

32. As the original name of the rune ᛖ, no. 19 in the futhark and thus with a real numerical value of **18** according to the theory we follow, previous researchers have assumed an Old Germanic word with the meaning 'horse'. In support of this, reference has been made to the Anglo-Saxon rune name *eh,* which otherwise means 'horse', a meaning to which the wording of the rune song fits well (cf. Bugge, Norges Indskrifter, Indl., p. 61). The Nordic name of the rune is unknown, as it has disappeared from the younger runic alphabet. The Salzburg manuscript gives its Gothic name as *eyz* without indicating its meaning. The horse is undoubtedly a highly magical animal,

especially among the Indo-Europeans. Cf. Malten, Das Pferd im Totenglauben. Even today, the horse's head is still used in black magic. One of the most important sacrifices of the ancient Indians was a horse sacrifice (aevamedha sacrifice). Among the Celts, Romans, and Slavs, horse sacrifices were highly regarded, and among the Greeks, horses were sacrificed especially to wind and death deities. Among the ancient Germanic peoples, the horse was associated above all with the god of wind and death, Odin, who on his eight-legged Sleipne, the best of horses, raced through the night in wild pursuit. Just as Thor was the god of the chariot (cf. § 20), Odin was the god of horses *κατ'ἐξοχήν*Hrostr (Rosterus in Saxo) was one of the names of Odin. As Starkad's unknown foster father, Odin was called "Horsehair Gran" (*Hrosshársgrani*), cf. Munch, Norrøne gude- og heltesagn[3], p. 170. According to Schück, Studier i nordisk litteratur- och religionshistoria 2, p. 171, Odin (Ygg) was originally a horse (the holy horse, the horse of terror). The rune ᛗ must therefore have been sacred to Odin. The number of runes is 18, and we find the same number in ancient Germanic magic poems characterizing Odin (Wodan): Odin asks the giant Vavtrudne 18 questions, and 18 are his magic songs (cf. § 40, 18), 18 magic words *Wuodan* utters in the second Merseburg charm to heal a horse's twisted leg, and the charm consists of 18 + 18 + 18 words (cf. § 43,2). The same numerical ratio is found in an Anglo-Saxon healing charm (cf. § 44, 1); and in an Old English book of healing (Old English Leechdoms 3: 34, 23) it is said of *Woden* (Oden): "Then Woden took nine divination sticks, struck the snake, and it flew into nine pieces" (= *ða genam Woden VIIII. wuldortanas, sloh ða ða næddran ðæt heo on VIIII. to fleah*) Cf. Chadwick, The cult of Othin, p. 29., thus producing 9 + 9 = 18

magical objects. In Busla's magic song in the Icelandic Bósa saga, the final stanza of the poem, called "syrpuvers" and in which "*mestr galdr*" is said to be hidden, consists of 36 = 2 × 18 magic words: Odin's number combined with that of the troll. When Egil Skallagrimsson causes the horn with the poisoned beer to burst by means of a magical poem, this consisted of 18 words in each half stanza, etc. (cf. § 45, 2 ff.). Odin's purely personal number Valhalla had 540 = 30 × 18 gates, cf. above p. 71. was clearly 18. If we seek a connection with Mithraic number symbolism, we find that in the Avestan-Persian lunar calendar, the eighteenth day was dedicated to Rashnu (Persian: Rashn), the god of justice. Since he, like Sraosha, was Mithras' brother and companion, he could hardly have been omitted from the Mithraic calendar. As the deity of justice, his emblem was a scale: he weighs the deeds of the deceased in the realm of the dead and does not tip the scales in either direction. Cf. Darmesteter, Le Zend-Avesta 2, p. 490. Now it is remarkable that, according to Greek numerology derived from Pythagoras, 5 was considered the symbol of justice, because a Greek E = 5 in the position ? in the well-known Delphic inscription represents the image of a wave. The *e* sign placed on the side has thus been a symbol of justice in ancient times. This symbol was undoubtedly also used among the letter-mystical Mithraists of late antiquity. The sign appears (like the invocation of Ananke, etc.) on the Sethian magic lead tablets, cf. my essay in Arkiv f. nord. filol. 43, new series 39, p. 108 f.: ? has been a magical sign of justice, whose number according to their lunar calendar was 18. In striking agreement with this, the older runic row, arranged according to the actual numerical values, shows, for example, the rune ᛗ at number 18, which, together with the variant ?

unsought, can be traced back to a Greek E placed on its side. Can Odin be thought to have anything in common with the Iranian Rashnu? Like him, he was a feared god of death above other deities, in older Germanic folklore probably more a god of the dead than during the Viking Age, when only those who died violently were thought to come to him. He was also equated with the Roman Mercury, who as a guide of souls has certain points of contact with Sraosha. According to Norse myth, however, Odin did not usually fetch the dead himself: he waited for them in his dwelling (cf. Olrik, Danmarks heltediktning 1, p. 73). In later Norse mythology, Odin's grandson Forsete is mentioned, to whom white horses were sacred (cf. the descriptions of *Fositeland* = Heligoland). as the god of justice, but it is quite likely that this is nothing more than a later development of one of the functions of the god of death in earlier times. There are several indications that Odin also acted as a judge. In Grímnismál, verse 30, there is mention of the horses that the giants ride "every day, when they have to go to Yggdrasil's sacred ash tree to pass judgment." This tree was named after Odin, and it would have been natural for him to preside over the court proceedings. In Gylfaginning 14, it is said of this ash tree: "It is there that the gods have their court. Every day the giants ride there over Bivrost, which is also called Åsabron. The giants' horses are thus named: Sleipne is the best, he belongs to Odin," etc. It is clear that Odin is thought to play the leading role here.

33. The rune for *m*, no. 20 in the futhark row, ᛗ, was called *man* (or *mon*) by the Anglo-Saxons, and in their runic poem this name is explained as meaning 'man, human being'. In Old Icelandic and Old Norse, the *m* rune was called *maðr*, and according to the Nordic runic poems, the name must also have

had the meaning 'man, human being' in this language area. In the Salzburg manuscript, the rune name is *manna,* which is the correct Gothic form of the Germanic word meaning 'man, human being'. We have no reason whatsoever to doubt that the older runic row in its original form had a name with this meaning. Since all mysticism revolves around man and his destiny, it is only natural to find his name among the sign names in a magical alphabet. The numerical value of the *m* rune must be **19.** We have already encountered this number on a late antique amulet, the magic ring testifying to astral Mithraic magic, which I have described and whose inscription has been explained gematria in § 14, 6. The number 19 is the great macrocosmic number, the sum of the numbers of the planets and the zodiac constellations (7 + 12). As I have already mentioned, this number must also have been the number of man in astral magic, for his soul was dependent on the seven planets and his body was subject to the influence of the twelve constellations in the zodiac ring (cf. § 14, 6 above). It is highly probable that the creator of the runic alphabet came to regard the number 19 as symbolising man in the Mithraic environment. The Mithraic religion had amalgamated an immense amount of astrological ideas, which ultimately had their origin with the Chaldeans. In addition, the doctrine of the "primordial man" belonged to the Persian religion. The Persian *Gayômard* certainly had its counterpart in Mithraic speculation as well as in its sister religions. In the Mandaean Book of Death, Adam means the same as the world soul, the "primitive man." Cf. Reitzenstein, Das iranische Erlösungsmysterium, p. 47, note 1 (and many other places, pp. 8 ff., 16 ff., 17, 22, 31, 35, 38 etc., see the book's index under "Urmensch") and Scheftelowitz, Die altpersische

Religion und das Judentum, p. 217 ff. The peoples of the Near East, as is well known, worshipped a thoroughly astral-mystical worldview. They believed in a precise correspondence between the life of the individual and the universe. This belief gave rise to the idea of the macrocosm and microcosm. The various star deities were imagined as parts of a mighty human-like sky god. Cf. Jastrow, Hepatoscopy and Astrology in Babylonia and Assyria, Proc. Americ. Philos. Soc. 47 (1908), p. 657 ff. The idea that man was created in the image of the cosmos and governed by the same laws as the universe was also the main idea in late antique astrology. Cf. Boll, Sternglaube und Sterndeutung[3], pp. 78 f., 136 f. and 166 f. In the Iranian lunar calendar, the nineteenth day was dedicated to the *Fravashi* (Persian *Farvardìn*), i.e. the immortal spirits of the deceased. From a subtle religious-philosophical point of view, the *Fravashi* were something somewhat different and extremely difficult to define (cf. Bartholomae, Altiran. Wörterbuch, p. 992, and Nathan Söderblom's dissertation Les Fravashis). The Germanic warriors certainly understood the meaning of the word in the same way as the Greeks: "*τὴν ἑορτὴν Φουρδίγαν καλουμένην, ὅ ἐστιν ἑλληνιστὶ νεκυία*" celebrated according to a Greek source the Persian king in the year 585 over the course of 10 days. Cf. more on this in T&M. 1, p. 132. This refers to an earlier time with 10 leap days. In the Persian calendar, it is not at all unusual for a day and a month to have the same name. If this day was connected with the ancestors, there must also have been a connection with the "first man." The Avestan-Persian lunar calendar is undoubtedly based on certain religious and astrological principles. The first day was dedicated to Ahura Mazda, as he was the supreme god. Mithra was assigned the 16th; he was the

mediator, ὁ μεσίτης, so his place should be in the middle. The 17th and 18th were dedicated to his brothers and companions: Sraosha and Rashnu. The name of the 19th, like many other names of the days, may have been chosen with reference to the numerology of astral speculation. Finally, it should be mentioned that in ancient Germanic religion there was a counterpart to the ancient Persian Gayômard (cf. Tacitus, Germania 2, on the divine progenitor *Mannus*).

34. The rune for *l*, no. 21 in the futhark ⌐, presents no difficulty in terms of its original name and its correct meaning. The Anglo-Saxon name is *lagu* and means 'water'. The Icelandic-Norwegian name in the Middle Ages was *lǫgr* with the meaning 'water, liquid'. Other Germanic languages, Danish and German, bear the same witness to the meaning. Cf. Bugge, Norges tidskrifter, Indl., p. 57 f., and the Gothic name *laaz* (preserved in the Salzburg manuscript) suggests a word that was originally phonetically identical to the previous names. Cf. Feist, Etym. Wörterbuch der gotischen Sprache[2], p. 238. With what we know from the above about the Persian origins of runic magic, it also fits very well that, alongside the rune for earth and the symbols for sun and fire (12 *petra, 15 'sun', 5 'torch') water, which for the ancient Persians was almost as sacred as fire, is also represented among the numerical symbols of the older runic alphabet. According to the theory we are following, the numerical value of this rune must have been **20.** Can this symbol also be traced back to the Mithraic, Persian-derived mystical view of numbers? If we turn to the Avestan-Persian lunar calendar, which has guided us in so many cases thus far, we find that the ninth day was sacred to fire (from *Àtar*) and the tenth to water (from *Âpô*). The reason for this placement seems clear to

me. Fire, as the most divine element, was given the number 9 = 3 × 3, and the next most sacred element, water, was given the number following it (water and fire were worshipped as brother and sister, cf. T&M. 1, p. 297). For certain mystical reasons, however, the number 10 had already been reserved by the creator of the runic alphabet for one of the manifestations of water, ice (cf. § 26). The creator of the runic alphabet clearly turned to the calendar when it came to finding magical significance in higher numbers (15–24). In the Avestan-Persian lunar calendar, the twentieth day is dedicated to Verethragna (Persian: Bahrâm). In Middle Persian times, this god was identified with the planet Mars and perceived as generating heat and fervor. Such a fusion with Mars cannot easily have occurred within the Roman Mithraic religion, which worshipped the deity of defensive power and victory. In the Avestan religion, this god was undoubtedly associated with water. In Yasht 14, 3, Verethragna boasts of being "the most glorious" in "glory"; in Yasna 68, 11, 21, the waters are said to give "power and glory." In yasht 14, dedicated to Verethragna, he appears in a variety of incarnations: as wind, bull, horse, camel, wild boar, young man, raven, ram, goat, and human. Each incarnation seems to symbolize a certain form of power. "Without doubt, he also had other incarnations," says Darmesteter in Le Zend-Avesta 2, p. 560, 'among others, the river.' The river, which carries ships, was a symbol of power in the Avestan religion. Cf. Darmesteter, op. cit. 2, p. 571 (bottom). When Verethragna appears as a white horse, one should assume that this figure was originally intended as a symbol of the foaming river (the mythical connection of the horse with this is too well known to need further explanation). The Armenian Hercules, Vahaken, who has his origins in the

Avestan Verethragna, is celebrated in folk tales as having been born in a supernatural way from water and is praised for his victories over dragons. Cf. Darmesteter, Le Zend-Avesta 2, p. 559 f.. In the Roman Mithraic religion, Verethragna was identified with Hercules, but we know very little about what was specifically associated with this deity. Of interest in this context is that he appears alongside the water god Poseidon in relief sculptures in Saarburg and Osterburken. We should also remember that Verethragna's ancient Indian counterpart is Indra, the slayer of Vṛtra, whose greatest heroic deed was the liberation of the waters, cf. Oldenberg, Die Religion des Veda[2], p. 133. On the mythological kinship between fire and water, cf. Segerstedt, Ekguden i Dodona, p. 49. (cf. (T&M. 1, p. 143). The number 20 also seems to have had a certain connection with water in Mithraism. According to Nonnus, a monk who lived in the 500s, one of the tests for Mithraic adepts was to bathe in snow for 20 days (cf. T&M. 1, p. 322, note 6). No doubt the naive monk's account of the Mithraic mysteries is considerably distorted (cf. T&M. 1, p. 30), but there may be some truth behind the number: perhaps 20 days of purification with cold water were required before admission to one of the seven degrees of mystery. If the so-called taurobolium (originally *ταυροπόλιον*), which at least during the later centuries of the imperial period occurred within the Mithraic cult, is known with certainty, it was considered to have an effective power for only 20 years (cf. T&M. 1, p. 335, note 5). This gruesome ceremony, which consisted of pouring the blood of a large slaughtered animal—a bull or a goat—over the mystic hidden below in a pit, must surely be regarded as a blood baptism. Blood, like all liquids, was considered by the imagines to be an element of water. It is well

known that Emperor Diocletian abdicated after exactly 20 years in order to obey "the stroke of victory" ("aux destins vainqueurs," T&M. 1, p. 335, note 5), a clear allusion to Hercules-Verethragna and his speech. — In some way, Hercules-Verethragna must therefore have been associated with water in the Mithraic mystery religion; the gushing, rushing water was probably thought to contain his power. Water in this form was, as is well known, worshipped by the ancient Germans. Cf. Mogk, Germanische Religionsgeschichte und Mythologie[2], p. 18. An Icelandic saga tells of Þorsteinn rauðnef, who had his home near a waterfall and sacrificed to it, thereby learning of his impending fate. On the same night that he died, it is said that all of his 20 large flocks of sheep threw themselves into the waterfall. This had received the soul of the master of the house, and therefore his flock also went there. Cf. Mogk, Germanische Mythologie, p. 66 f.. It is hardly likely that the man about whom this legend arose owned exactly 20 hundred sheep at the time of his death. It is more likely that the number was determined by tradition, as 20 was a sacred number associated with water. According to ancient Norse mythology, the deities of the sea were Äge (*Ægir*) and his wife Rån (*Rán*), who had nine daughters. These daughters are also mentioned in some sagas (e.g., in Fóstbrœðrasaga 13) as evil beings who lure sailors to their doom. The preserved tradition has nothing to say about any sons. The only case that I know of that could possibly be relevant is the Beowulf poem's account of "nine sea giants" (*niceras nigene*, line 575). The original text uses a masculine word, but its correct meaning is not known with certainty (perhaps it should be translated as "sea horse"). However, this does not necessarily mean that the rulers of the sea had only daughters. Let us

venture to assume that they had just as many sons—such symmetry is a common phenomenon in mythology; cf., for example, the nine boys and nine girls in the cult of Zeus and Niobe's nine (or seven) sons and nine (or seven) daughters. —, then in ancient Norse folklore the sea would have been represented by 20 water demons (2 + 9 + 9).

35. The name of the *ng* rune, sign no. 22 in the futhark ◇, was *ing* among the Anglo-Saxons, and this rune is mentioned in their runic song:*(Ing) wæs ǽrestmid Éastdenum gesewen secgum* = "Ing was first seen by the East Danes." About *Ing* (in Old Germanic **Inguz* or **Ingu̯az*Wessén, Studies in Swedish Pagan Mythology and Ancient History, p. 45 f. and p. 55 f.; concerning literature on the inguaeon question, see p. 48, note 3.) we do not know much, but it is beyond doubt that the name belonged to a tribal hero or fertility deity who was very close to Frö and merged with him in the Uppsala cult. The Inguaeons were clearly named after him, who according to Tacitus (Germania 2) were "living closest to the ocean." The ocean probably refers to the Baltic Sea or the North Sea and the Baltic Sea, and the name Inguaeones should in that case have been a more comprehensive name for the people described by Tacitus in chapter 40 of Germania, who were pronounced fertility worshippers. If we now search the Mithraic calendar for an equivalent to Ing, whose sacred number must have been **21,** we find that the twenty-first day of the Avestan-Persian lunar calendar was dedicated to Râma, who is also mentioned in the Avesta as Râma Hvâstra (Persian: Râm). He was a fertility deity, a guardian god of fields and pastures, a "Flurgott" according to Lehmann's terminology (cf. Chantepie de la Saussaye, Lehrbuch der Religionsgeschichte[4] 2, p. 227). He is mentioned immediately

after Mithra, when the latter is invoked as "lord of the wide fields"; he is said to give food its taste, and in order for a country to have good crops, the following was proclaimed: "I wish for this land Râma Hvâstra" (cf. Darmesteter, Le Zend-Avesta 2, p. 698 and p. 712, as well as 1, p. 10 and p. 420). Like Mithra, he also seems to have had a certain relationship with the sun. Cf. Darmesteter, op. cit., 1, p. 182. The similarities with the Uppsala god Yngve-Frö and the Edda poem Ingunar-Frö (Icelandic *Ingunar-Freyr*) are obvious (cf. Lokasenna, str. 43). Regarding the etymology of the name *Ing*, I refer to Noreen (Namn och bygd 8, p. 1 f.), who attributes an original phallic meaning to it (comparison with Greek ἔγχος 'lance').

36. As I have already mentioned, there may be some doubt as to the correct order of the last two characters in the futhark. For reasons that I will explain in more detail in my gematric interpretation of the oldest runic inscriptions (cf. §§ 48–51), a magical rearrangement of the end of the runic row has taken place on the Kylverstenen, so that the *d* rune now stands before the *o* rune. We must therefore assign the numerical value **22** to the *o* rune ᛟ, which in the amulet futharch stands as number 23, in accordance with my theory. If we wish to explain the origin of the rune's name in light of this, we are faced with a question that can hardly be answered without some hesitation. In Old Germanic, *o* was very rare in unstressed syllables, and it would therefore not be surprising a priori if we were to encounter a less clear connection between name and number on this particular point. It is conceivable that the purely phonetic possibility of choosing a symbolic name in this case, due to overly narrow restrictions, placed such a strong constraint on the creator of the runic alphabet that he was unable to find a truly apt name and

had to settle for a less suggestive word. With regard to Anglo-Saxon and Gothic tradition, cf. Bugge, Norges Indskrifter med de ældre runer, Indl., p. 63, and Feist, Etym. Wörterbuch der gotischen Sprache[2], p. 408. the Old Germanic name for this rune has been assumed to be *ōþal(a), meaning 'odal, inheritance'. In the Avestan-Persian calendar, the twenty-second day of the month was dedicated to a wind deity, Vâta (Persian: Bâd). In this case, it is the beneficial, gentle wind that is referred to: "We sacrifice to the Wind, the beneficent one, who does good," says a yasna, referring to Vâta, which invokes the monthly deities in order. Cf. Darmesteter, Le Zend-Avesta 1, p. 143. Vâta was a wind deity who held the earth "above and below" him, and he was believed to carry water from the rain-giving Tîshtrya (Persian: Tîr), i.e. Sirius. Cf. Darmesteter, op. cit., p. 320. We are thus dealing with a mythical nature being who is favorable to crops. Vâta should naturally have been perceived as a protective being for agriculture, on whose success the value of the cultivated land depended. If *ōþala was the original name, such a line of thought would have been the closest basis for the choice of name, which, as I have already pointed out above, obviously had to be made within a very limited vocabulary.**37.** The numerical value **23** is assigned, as I mentioned above, to the *d* rune, which is the last character in most of the preserved older futhark rows. In Anglo-Saxon, the rune was called *dæg* (*daeg, deg*), and this word is identical to the homonymous appellative, which corresponds to our Swedish *dag*. This meaning is clear from the Anglo-Saxon rune song. Cf. Bugge, Norges Indskrifter, Indl., p. 64. The Salzburg manuscript has the name daaz for the letter d, which presupposes a word dags 'day' in Wulfila's language form. We have no reason to doubt the originality of the rune name. A

word with the meaning 'day' is of the same type as the rune names with the meanings 'torch' and 'sun' and, by its very meaning, allows us to suspect a connection with the Persian religion of light. That the day, the light, was worshipped by the Mithraists in the Roman Empire is also attested; a preserved inscription contains, for example, the word LVCI 'to the light' among other dedications addressed to divine powers (T&M. 2, p. 167, inscription no. 520). In all likelihood, one day in the Mithraic lunar calendar was dedicated to this deity. The Avestan-Persian calendar had the 1st, 8th, 15th, and 23rd days of the month dedicated to the chief god Ahura Mazda (Persian: Auhrmazd or Dai 'the creator'), thus to the creator, the father of light (Greek: Oromazdes). The month was thus divided into four weeks, the first two with seven days and the last two with eight days. Cf. Darmesteter, Le Zend-Avesta 1, p. 34 f., and Stucken, Der Ursprung des Alphabets und die Mondstationen, p. 45. However, in agreement with previous researchers, I have assumed a deviation from the calendar of the mother country for the Roman Mithraists: the sun, as Mithras' companion, was assigned the fifteenth day. My investigations into letter magic have provided further support for this view. It was, of course, highly inconvenient and contrary to Greek-Roman timekeeping practice to have four days in the week dedicated to the same deity, to which must be added the fact that weeks of eight days had to be abandoned. We can therefore safely assume that the days of the month, which in Persian must be named with reference to the following day in order to be distinguished, i.e. "the day of the creator before the day of fire" etc.*Dai pa Âdar* (the 8th), *Dai pa Mihr* (the 15th), *Dai pa Din* (the 23rd), were given new names within the Roman Empire that harmonized with the

character of Oromazdes, enabling a clear distinction without ambiguity in expression. If the 15th day was dedicated to the sun (Sol), what could be more natural than dedicating the 23rd to light (Lux)? The Old Germanic *dagaz* (Norse *dagaR*) most certainly originally denoted daylight (not the day as a measure of time): in Swedish, we still have the word *dager*. The word ultimately goes back to the Indo-European verbal root **dhegh*- 'to burn' (cf. Old Norse *dáhati*, lit. *dègti* with this meaning).

38. We are now at the end of the outer circle. The numerical value **24** should, as I have already mentioned, be assigned to the first sign of the futhark, the *f* rune ᚠ. Both in the Anglo-Saxon runesong and in the Old Norse and Old Icelandic runic verses, the name of this rune is explained as meaning 'goods, property' (Anglo-Saxon *feoh* and Icelandic *fé* also have the original meaning 'livestock', cf. Latin *pecunia*). That the rune of wealth thus has the highest numerical value is, as I have already pointed out, consistent with a numerical interpretation of the names of the runes. It would in itself be sufficient to explain its number in the sequence of characters in the runic alphabet, especially since the number 24 plays an important role both in the Roman system of weights and coins (1 uncial = 24 scripula, cf. Hultsch, Griechische und römische Metrologie[2], p. 148) and in the game of dice (4 sixes = 24). Of particular interest, however, is that the Persians and the Roman Mithraists had a female deity in their pantheon, who in the Avesta is called Ashi Vañuhi and is said to be "the good wealth." "Her goodness consists in protecting the wealth of the good," says the commentary on a Sanskrit interpretation of the Avesta, in which she is identified with the Indian *Lakṣmī,* goddess of luck and beauty, whose name also means 'wealth' (cf. Darmesteter, Le Zend-Avesta 1, p. 16 with

note 56). We also know that the Persians invoked Ashi Vañuhi in particular to gain wealth. Cf. Chantepie de la Saussaye, Lehrbuch der Religionsgeschichte[4] 2, p. 228. This ancient Persian female deity was the sister of Sraosha, Rashnu, and Mithra and thus must have had a prominent place in the Mithraic religion (cf. T&M. 1, p. 227, note 6). In the Avestan-Persian lunar calendar, the 25th day was dedicated to Ashi Vañuhi. If the same calendar system formed the basis for the numerical mysticism of the runes, the Mithraic number symbolizing wealth would have been 25, a number very close to the numerical value of the rune *f*, which in any case must have remained at 24, since for reasons of alphabetical magic, several letters were not allowed to appear in the runic alphabet. Cf. my essay Der Ursprung der Runenschrift und die Magie, Arkiv f. nord. filologi 43, new series 39, p. 100. However, we must now take into account that the Mithraic calendar, which was the immediate model for the creator of the runic alphabet when he devised his numerical mystical system, cannot have corresponded in every detail to the Avestan-Persian calendar (cf. previous paragraph). With regard to the 25th day in particular, previous research has emphasized that this day was sacred to Mithra in the Roman Empire; at least, the *natalis Invicti* was celebrated on this day in December (cf. T&M. 1, p. 325). I therefore believe that it is by no means too bold to assume that Mithra, in his Roman cult, had two days a month dedicated to him. The 16th may have been called *dies dei Invicti* and the 25th *dies natalis Invicti*. Under this assumption, however, Ashi Vañuhi's day must have been moved. This may have been moved back one day and fixed to the 24th, which in Persia was dedicated to the personification of the true religion (from *Daena*, Pers. *Dîn*), an

abstraction that would probably have been difficult to maintain in a more prominent place within the Roman cult of Mithras. If such a shift has occurred in the calendar, the number of the rune ƒ and the number of the month of the goddess of wealth have been the same. That the number 24 played a role in Mithraic magic seems to be evident from certain monument inscriptions and a lucky amulet (cf. § 13 and § 14, 1).

CHAPTER III

NUMBER MYSTICISM IN SPELLS AND INCANTATIONS

39. In the previous chapter, based on what we know or can conclude about the symbolism of numbers in late Greco-Roman antiquity around 200 AD, the numerical values of the runes and their resulting order have been established. If the results of this investigation are correct, this should be verifiable through a mathematical examination of the older magical runic inscriptions, in which, as in the late antique letter-mystical inscriptions, we can expect to find gematria or at least simple letter counting. Before we proceed to such a test of our hypothesis, we must consider another source which, if properly utilized, should be able to shed some light on the ancient Norse beliefs about the mysticism of numbers and the magical power of runes, namely a series of preserved literary monuments from a time when number and rune magic had not yet been completely forgotten.

First and foremost, we must consider the Edda poems, which, as I have already mentioned, contain numerous references to magically significant numbers and the use of magical runes. Until now, most of these hints have been incomprehensible to our time, and research has generally resigned itself to the riddles that the ancient poems tell us in obscure language. However, if we gain a proper understanding of the order of the runes and succeed in determining the numerical values of the symbols, it is

conceivable that, guided by this newly acquired knowledge and taking into account the numerical mysticism of other peoples, we will be able to find meaning in much that has hitherto seemed hopelessly obscure. The information we can thus obtain about Old Norse number mysticism should be of help to us in our ultimate goal, the explanation of the true meaning of the magical runic inscriptions.

40. The section of Hávamál known as Lióðatal, "Oden's magic songs," consists, as is well known, of no fewer than 18 stanzas, in which one type of galdrar after another is listed. It mentions magical formulas or spells (*lióð*) that can blunt weapons, calm storms, protect in battle, bring the hanged back to life, force a poisoned woman to show favor, etc. It has been noted with regret that the "father of galdrar" merely lists a series of magic poems, but unfortunately does not provide any examples of such. However, it has not yet been considered that if we do not have a collection of galdrar before us, we may instead have been presented with a series of descriptions of how different types of galdrar relate to each other in a mystical sense: Lióðatal, like runic chants, may be a mnemonic poem. It is, of course, impossible to interpret these obscure allusions completely in a preliminary investigation. However, much of it should correspond to what we have learned about Old Norse number mysticism by establishing the correct order of the runes and the probable original names of these signs. However, it would be unreasonable to expect every detail to correspond to a runic name. The poem is not about runes, but about numerical relationships. However, since there is always a connection between a rune and its number, evidence for the correctness of the uthark theory can be found in more than one place in the

poem. Where we do not find such evidence, we must content ourselves with information about the special magical power of certain numbers, information that may be of great importance for understanding the art of divination and even runic magic, for these were undoubtedly bound by the requirement of strict correspondence between a certain power number and the number of stanzas and words in a poem or the sum of the runic characters in an inscription and their numerical values.

An analysis of the content of Lióðatal seems to me to show that stanzas 1–8, with a few exceptions, have more to say about numbers than about runes, but that from stanza 9 onwards, the connection with the runic names often becomes quite clear.

1. The first stanza (perhaps a defective introductory stanza + a remnant of a first stanza) reads as follows: The Edda is quoted here and in the following according to Gustav Neckels' edition of 1914 (with corrections of a couple of printing errors). The translation gives Åkerblom's interpretation, but the line arrangement has been adapted to Neckels' arrangement of the Icelandic text:*Lióð ek þau kann, er kannat þióðans kona né mannzkis mǫgr; ..... Hiálp heitir eitt, en þat þér hiálpa mun við sǫkom ok sorgom ok sútom gǫrvǫllom.*

— "Those songs I do not know, nor am I the son of any human being. *Help* is mentioned first, and help it can give against soot*The word 'soot' is used by Åkerblom for the sake of alliteration; the Icelandic sút means 'worry,'* against sorrow and against strife."

According to the interpretation principle indicated above, the poem teaches us what a magic spell or a galder*A sequence of*

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runes of the same type should naturally have the same effect. containing a sum of words consisting of a prime number, possesses magical power: it protects against discord (the evil number two can do nothing against a number that can only be divided by 1, cf. § 19), it helps against sorrow and all kinds of worries.

2. The second stanza, which may have lost a second half, reads:

Þat kann ek annat, er þurfo ýta synir, þeir er vilia læknar lifa.

— "The second, I know, is needed by people for happiness and healing power."

Here, a connection with the tursruna is discernible. The magical number of the demons was 2, which included "wild men" and goblins. A connection with these was needed to produce medicine. I recall the Germanic folk tales about the "wild men's" knowledge of herbs that cure illness. A study of Mannhardt's writings provides many examples. Cf. e.g. Antike Wald- und Feltkulte, pp. 39, 47, 98, 147, 149, etc. A counterpart in antiquity can be found in the stories about the relationship between centaurs and sylvaners and the plants that bring good health.

The third to sixteenth stanzas are completely preserved, some possibly expanded by later additions:3. Þat kann ek it þriðia: ef mér verðr þǫrf mikil hapts við mina heiptmǫgo, eggiar ek deyfi minna andskota, bitat þeim vápn né vélir.

— "A third I know: in urgent need to stop the enemy's advance, I can dull the weapons of those who threaten me. Then neither cuts nor blows will hurt."

The number three would have been understood in magical thinking as having the power to neutralize the effect of both edges of a blade. Since particularly dangerous swords would have been considered enchanted, it would have been natural to seek magical help from the divine number (3). Incidentally, it is possible that in this case, as in the following, we are dealing with mystical beliefs that existed among the ancient Germans independently of the arrangement of the runes (most likely due to borrowings from Greek-Roman magic).

4. Þat kann ek it fiórða: ef mér fyrðar bera bǫnd at boglimom, svá ek gel, at ek ganga má; sprettr mér af fótom fiǫturr, en af hǫndom hapt.

— "A fourth I know: if enemies try to bind my arms and legs, I will sing that I go where I wish; then every toe will spring from my foot, then every finger will spring from my hand."

Here, a connection with the wagon rune is conceivable. This was Thor's rune, and 4 was his number (cf. § 20). By invoking him, one could imagine gaining the power to break chains. However, we must consider the possibility that the belief in the power of the number 4 to free one from chains may originate from late Greco-Roman antiquity. As already pointed out, in original Greek number mysticism, 4 was the sacred number of Hermes (cf. § 2 f.), and this god was a master at freeing people from chains. Well known is the myth of how Hermes-Mercury freed Ares-Mars from the shackles of the Aloadae. I also

consider it possible that Ares-Mars' connection with the number 3 may be the basis for the subversive power of this number mentioned in stanza 3 (cf. § 2 and § 3, 7). *Þat kann ek it fimta: ef ek sé af fári skotinn flein i fólk vaða, flýgra hann svá stint, at ek stǫðvigak, ef ek hann siónom of sék.*

— "A fifth I know: if a hostile javelin flies toward a fighting flock, no matter how fast it flies, I can stop it if only my eye sees it."

I have pointed out above that the number five has had and still has magical significance for a number of peoples when it comes to the eye (cf. § 21). Among the Mithraists, the number 5 was also sacred to Mars and probably also to Cautes. A protective measure consisting of a spell based on this number should therefore be expected to have the power to stop spears or otherwise provide protection in battle (cf. § 44, 2).

6. I cannot see that: if a warrior strikes me with a spear, and the one who strikes me is strong, then he will eat me rather than I him.

— "A sixth I know: if a warrior wounds me with runes on a sap-fresh root, the man who incites me to anger shall be consumed by misfortune more than I."

This verse has been regarded as one of the most obscure. What is most likely meant is to counteract the magical power of disease-causing runes carved on the root of a growing tree. See Hjelmquist in Studier tillegnade Esaias Tegnér (Studies dedicated to Esaias Tegnér) on January 13, 1918, p. 395. The moon, whose sacred number among the Mithraists was 6 (its sphere was considered to lie closest to the sun), has, according to ancient astrological belief, been considered to rule over the sap in

plants. Cf. Bouché-Leclercq, L'astrologie grecque, p. 109, and Boll, Sternglaube und Sterndeutung[3], p. 50. The moon was above all the source of moisture, cf. Ashmand, Ptolemy's Tetrabiblos (London 1917), p. 20. According to a doctrine presented by Plutarch, the principle of life, which causes the body to grow, originates from the moon, and reason from the sun, cf. Cumont, Den astrala religionen i forntiden, p. In the north, Njord's number was 6 (cf. § 22), and he ruled over increasing growth: "What is to flourish must begin with the waxing moon, and what is to decline or fall apart must begin with the waning moon," says Mogk, Germanische Religionsgeschichte und Mythologie, p. 21, on the moon magic of the ancient Germans. and could therefore neutralize a harmful decline.

7. Þat kann ek it siaunda: ef ek sé hávan loga sal um sessmǫgom, brennrat svá breitt, at ek hánom biargigak; þann kann ek galdr at gala.

"I can do one more thing: when I see a crackling flame shining around a bench, no matter how wide it burns, I will bind it. I can sing such a song."

The number 7 symbolized the sun sphere in the Mithraic religion. The number 7, hidden in a galder, should thus have power over the flames (the hot), just as the number 6, the number of the moon, has power over the sap of plants (the moist).

8. I can do that, which is useful to all: whoever's hatred grows with the son of Hilding, I can quickly heal.

— "I know an eighth, for all who have learned it, for joyful use and benefit. If hatred grows between the sons of rulers, I can quickly remedy it."

According to what I emphasized in the previous chapter, the number 8 should be symbolic of the vault of heaven, the unchanging fixed stars. The stanza therefore probably refers to the magical significance of the number 8 for maintaining harmony and immutability.

9. *Þat kann ek it níunda: ef mik nauðr um stendr, at biarga fari mino á floti, vind ek kyrri vági á ok svæfik allan sæ.* — "I can do one more thing: if danger threatens, I will save my ship from the waves. I will calm the wind on the waves at once and sing the sea to sleep."

Here the connection with the rune *nauðr* 'need' (Ananke), whose number is precisely 9, is obvious. As a god of magic, Odin was closely associated with the number 9 and the rune *nauðr* (cf. § 25). As a god of the wind, he had the power to calm the wind and the waves.

10. *Þat kann ek it tíunda: ef ek sé túnriðor leika lopti á, ek svá vinnk, at þær villar fara sinna heim hama, sinna heim huga.*

— "I can do one thing: if tunridor appear to be flying in the air, then I know how to make the lost ones go to their rightful homes, to their rightful homes."

"Tunridor" definitely refers to 'bewitched people who, while leaving their bodies (homes) in their homes, traveled around in the air at night and committed evil deeds' (Åkerblom, Den äldre Eddan 1, p. 65, note 1). A galder, in which the magical power of

the 10th century was hidden, must have had the ability to force these bewitched souls to leave their enchanted harbor. The stanza confirms my assumption that the runic magic of late antiquity took over the doctrine of the 10s as *ψυχογόνος* 'soul-creating' and thus soul-conquering (cf. § 26).

11. Þat kann ek it ellipta: ef ek skal til orrosto leiða langvini, und randir ek gel, en þeir með riki fara heilir hildar til, heilir hildi frá, koma þeir heilir hvaðan.

— "One I can: if I go to battle at the head of old friends, I sing under shields, and powerfully protecting the unharmed they go to feud, the unharmed they go from feud, they go unharmed everywhere. The number 11 is attributed to the god Frö as *árguð* (cf. § 27). If we were dealing with a magic poem from the early days of runic magic, verse 16, Tys's verse, would certainly have been used to gain protection in battle. At the beginning of the Viking Age, however, Frö seems to have developed into a god of battle. In "Sigurðarkviða in skamma" (line 24), the warrior is referred to with the kenning "Frös vän" (*Freys vinar*), and in the skaldic poems there are several allusions to Frö as a god of battle. In Ulv Uggason's "Húsdrápa," for example, there is a stanza (interpreted by Åkerblom):

"On the golden-bristled boar was placed at Grimnes' son's castle, which glimmers, the journey of Frey, who, skilled in murder, led the battle, he gathered."

We therefore have reason to believe that during the Viking Age, attacks were sometimes carried out under the invocation of Frö. The custom may have spread from Frö's supposed descendants, the kings of Uppsala, and the descendants of the

Yngling dynasty in Norway. It is also conceivable that, for purely magical reasons, people sought help from Frö, the god of life, when it was a matter of escaping danger unscathed (*heilir hildi frá*), while invoking Odin, the god of war and the supreme god of the art of war, when victory was sought at any price. That the former alternative is the case is clear from the words of the Edda stanza quoted above.

12. Þat kann ek it tólpta: ef ek sé á tré uppi váfa virgilná, svá ek rist ok i rúnom fák, at sá gengr gumi ok mælir við mik.

"I can do one thing: if I see a tree with a corpse turned toward the wind, I know how to carve and color the runes so that the dead man will go down and speak with me." I have previously (cf. § 28) expressed the opinion that the *þ* rune, mentioned by the Goths as *pertra* (originally **petra*), should have had the numerical value 12 and symbolized the earth. The above-quoted Edda stanza provides further support for this assumption: the twelfth galder, i.e., a magic poem with the number twelve hidden in its word count, is said to have the power to bring a hanged man down to the ground, to the earth, to speak with the sorcerer. The number of the earth, twelve, thus draws him to itself, cf. the Anglo-Saxon spell mentioned below in § 44, 3 to prevent bees from leaving the farm.

13. Þat kann ek it þrettánda: ef ek skal þegn ungan verpa vatni á, munat hann falla, þótt hann i fólk komi, hnigra sá halr fyr hiǫrom.

— "A thirteenth I can give with power to a warrior whom I have sprinkled with water, that he shall not fall, however fierce the battle; he shall not perish by the sword." Here, as in stanza 11, it is a matter of protection in battle, but not the salvation of

an entire army, rather help for a single individual who has been magically blessed. According to what I have explained above (cf. § 29), the yew rune should have been the thirteenth rune and its number sacred to the bow god Ull, as in the religions of the Near East to Ahura Mazda and Jupiter Dolichenus. In an astrological prescription (see Boll, Sternglaube und Sterndeutung[3], p. 176), the 13th day is said to be favorable for attacks. Of this, Snorri says in Gylfaginning (chap. 30): "it is good to invoke him in single combat." As for the implied magical sprinkling of water, there is no need to assume Christian influence. The sprinkling of water, which was also one of the ceremonies of the Mithraic mysteries, existed in the North already in pre-Christian times: the first bath water was poured over the child's head while solemn words were spoken. Cf. Olrik og Ellekilde, Nordens gudeverden, p. 137.

14. *Þat kann ek it fiórtánda: ef ek skal fyrða liði telia tiva fyrir, ása ok álfa ek kann allra skil; fár kann ósnotr svá.*— "I know a fourteenth: if I count the gods for the gathered people, I know all about the Aesir and the Alfar. Such things many wise men do not know."

According to what I have explained in the previous chapter (§ 30), the fourteenth rune in the utharkrad should probably have been called **alhīž* and been dedicated to the ancient Germanic equivalent of the Greek Dioscuri and the ancient Indian Asvins. Each of these deities was probably considered, at least in the Mithraic religion, to rule over half of the zodiac. Judging by Grímnismál, the åsar and alvar in the ancient Germanic astral conception were assigned certain constellations as their homes. Earlier researchers have, as is well known,

devoted considerable effort to locating the various divine dwellings within the zodiac. I believe I have come considerably closer to solving this riddle and will explain this in a separate essay (cf. p. 84, note 1). At the current state of our knowledge, it seems reasonable to assume that the ancient Norse people really knew and named the constellations of the zodiac and imagined a row of divine dwellings there. Anyone who wanted to show off their knowledge of mythology to the people could do so by pointing out the constellations in the zodiac and naming them. Since the Germanic equivalent of the Dioscuri was probably a pair of gods or a god and a demigod who protected the sun's path across the sky, a galder directed at them and adapted to their sacred number 14 could have conferred the ability to correctly remember matters relating to the zodiac.

15. Þat kann ek it fimtánda, er gól Þióðrørir, dvergr, fyr Dellings durom: afl gól hann ásom, en álfom frama, hyggio Hroptatý.

— "I know a fifteenth, as Tjodröre told me, the dwarf at Dellings' door. He sang of power to the gods, of happiness to the Alvars, and of abundant wisdom to Hropt."

Previous researchers have already realized that this stanza refers to the sun. ÅkerblomJfr Den äldre Eddan 1, p. 66, note 1. For example, he explains the expression "at Dellings' door" as "at sunrise." Delling was, as is well known, the father of Dag. In the order of the runes, the sun rune should be in 15th place (cf. § 18) — and the 15th stanza in Lióðatal must, as mentioned above, have something to do with the sun. That this, whose home is the constellation Leo, above all bestows strength (*afl*) and skill (*frame*) upon the brave and courageous, is consistent with classical astrology. According to ancient belief, Apollo's celestial

body also gave wisdom: "Le Soleil est, cela va sans dire, un dieu intelligent, *αὐτοκίνητος,* et s'il est 'l'Apollon oblique' (*Λοξίας*), c'est qu'il le veut," says Bouché-Leclercq, L'astrologie grecque, p. 127, note 3.

16. I can do that in sixteen: if I want to make a man lose everything he has, I will make his wife white with envy and I will steal all her possessions.

— "I know a sixteenth: if I desire a woman's love and favor, I will turn the heart of my white-armed beloved so that her whole soul will be changed."

This stanza is one of the more difficult to interpret. The sixteenth rune is Tys (cf. § 18). Perhaps the ancient Germanic god of war, who over the centuries has been pushed further and further into the background, developed among the Norse people of the later Viking Age into a god of division — "he is not counted among those who reconcile peoples," says Snorri (cf. Gylfaginning 24). However, we should bear in mind that Lióðatal is not a poem about runes but primarily a poem about number mysticism and its use in galdrar. The number 16 therefore does not necessarily need to be explained by the name of rune no. 16. This number is also = 2 × 8. As I pointed out above (point 8), 8 must have been the numerical symbol for faithfulness. If the aim was to enchant this, a combination with the demonic number 2 would probably be used, cf. the sorceress's attempt to bring misfortune upon people by reciting an incantation consisting of 38 words, i.e. 2 (the lucky number) combined with 19 (the number of man), which will be discussed in more detail below, § 45, 5.

17. The seventeenth stanza is corrupted:

Þat kann ek it siautiánda, at mik mun seint firraz it manunga man; —

— "I know a seventeenth: ... that she will forget me, the maiden who is loved by me."

However, the words *manunga man* 'maiden' tell us that this is about eroticism. In Icelandic skaldic poetry, it is attested that the birch tree and its number have a magical relationship, especially with the female sex. The birch was also Frigg's tree (cf. § 31). The fact that the seventeenth stanza refers to a relationship with a maiden is consistent with the uthark theory, according to which the number of the *b* rune is 17 (not 18 as in the futhark row).

18. In the eighteenth stanza, an insertion or addition has been made. The latter seems to me to be the most likely. In that case, the original stanza would have read: *Þat kann ek it áttiánda, er ek æva kennig mey né mannz kono — allt er betra, er einn um kann; þat fylgir lióða lokom —*

— "An eighteenth I know, which I will never reveal to wife or man, best is all that one knows, thus ends the song." Åkerblom, Den äldre Eddan 1, p. 66, note 3, considers the last two lines to be "a disturbing insertion." I have inserted his translation of these lines above instead of his interpretation of two others, in which I see an addition.

This refers to the number 18, which is Odin's special number (cf. § 32). His silence on the meaning of this is entirely consistent with the situation in another Edda song,

Vafþrúðnismál. Here, Odin asks 18 questions to the giant, who is presumptuous enough to seek to compete with him in mythical knowledge. Before the last (18th) question:

"What did Odin whisper in his son's ear when Balder was carried on his funeral pyre?"

the giant remains silent. This is something only Odin knows. In the second Merseburg incantation, Wodan reads over Balder's injured horse a single stanza consisting of exactly 18 words (cf. § 43, 2 below). According to the Eddaskald's assumption, Odin probably whispered a galder into the ear of the dead Balder, also consisting of 18 words, which in some way referred to revenge for what had happened or the future lifting of Balder's captivity by Hel. I consider such an interpretation more likely than that Odin's whisper was a reflex of a custom of whispering something in the ear of the dead to prevent them from returning (cf. Rosén, Om dödsrike och dödsbruk i fornnordisk religion, p. 110 ff.). In any case, the poet of Vafþrúðnismál would have been unfamiliar with such a meaning.

41. Among the Edda poems there is another section dealing with magical knowledge, Grógaldr, "Groa's magic songs." A son visits his mother's grave to receive a message from her. Standing on a rock, the dead woman sings 11 stanzas to her son, the first 9 of which, like Odin's 18 "galdrar," turn out to be a list of different types of magic songs, arranged as "the first," "the second," and so on. These nine stanzas have a content that is largely parallel to the first nine stanzas of Lióðatal. However, stanzas 4 and 5 have been reversed in Grógaldr, apparently because they had the same type of alliteration in the opening line: fiórða ... fiǫturr and fimta ... fiándr. *fiándr*. These nine

stanzas, which probably belong to a later period than Lióðatal, have a more "post-classical character" and are not found in any old manuscript (cf. Erik Noreen, Den norsk-isländska poesien, p. 75). Stanza 13 (= the eighth talmystic stanza) refers to *kristin dauð kona.*, and although they are hardly as valuable as evidence of the talmystic nature of the galdr as the stanzas discussed above, they are nevertheless of considerable interest. An analysis of their content is therefore essential to our investigation. The nine talmystic stanzas are reproduced with translations and interpretations from the same sources as above (cf. p. 104, note 1).:

1. *Þann gel ek þér fyrstan, er kveða fiǫlnýtan — þann gól RindrNeckel has Rindi, but the manuscript reader Rindr makes better sense. Rani —: at þú af ǫxl skiótir, þvi er þér atalt þikkir: siálfr leið þú siálfan þik.*

— "The first, I sing, is full of helping power. Rind sang that song for his son. It takes all the heavy burdens from your shoulders, so that you may lead yourself." As in the first stanza of Lióðatal, this refers to the helping power of the number 1 and the numbers that merely conceal this (prime numbers). The second line of the stanza exists in several different variants. With Åkerblom (and others), it seems most natural to me that this refers to Rind and her son with Odin, Balder's avenger (one variant has *Vala* instead of *Rani;* the original was probably *Vrindr* and *Vala*, after the loss of *v* before *r* in the final syllable, the alliteration was destroyed and a new name was inserted). About Vale it is said in *Vǫlospá* (line 32): "A brother to Balder was soon born, and one night old he seized the sword." Here there is an allusion to the number 1, which leads us to believe that this

number was magically associated with Balder's avenger. 2. *Þann gel ek þér annan: ef þú árna skalt vilia lauss á vegom, Urðar lokkor haldi þér ǫllom megom, ef þú á sinnom sér.* — "The second I sing, if you are doomed to walk on a dangerous path. May the norns protect you from danger as long as you are on the road!" As in the corresponding stanza of Lióðatal, this refers to the magical power of the number 2. Here it refers to a song that can protect a traveler from demonic forces so that he does not get lost. The Norns, of whom Urd is mentioned in the third line of the stanza, were giants:

unz þriár kvómo, þursa meyiar, ámátkar miǫk, ór iǫtunheimom. — "Then came three sisters from the world of giants, mighty and threatening," it is said in Vǫlospá (str. 8). According to this understanding of their origin, a Norse goddess should thus have a magical connection with the tursrunar and the number 2. (According to Gylfaginning 14, whose source is probably stanza 13 in Fáfnismál, there are also Norse goddesses of the Åsar, Alvars, and Dwarves.)

*3. Þann gel ek þér inn þriðia: ef þér þióðáar falla at *fiǫrlotom, Horn ok Ruðr snúiz til heliar heðan ok þverri æ fyr þér.*

— "The third I sing, if a defiant wild river threatens to extinguish your life. May Rud and Horn flow to Hel's realm and sink before your feet!"

It is not easy to interpret this verse with reference to previously known Old Norse religious beliefs. However, if we turn to late antique magic, we find a clear connection between the number 3 and the river god Neptune-Poseidon. In Greek and Roman mythology, he was depicted with a trident in his

hand. In Mithraism, Poseidon, who appears on several monuments in relief, is said to have had the number 3 as his or one of his magic numbers: the third horse in the quadriga, the symbol of the four elements, was in all likelihood sacred to Poseidon. Cf. Cumont, T&M. 1, p. 105: "In the cosmological myth, which Dion probably borrowed from the Magi of Asia Minor, the third of the horses that pull the quadriga of the supreme god is dedicated to Poseidon." (This horse represented water.)

4. Þann gel ek þér inn fiórða; ef þik fiándr standa, gǫrvir, á gálgvegi, hugr þeim hverfi til handa þér ok snúiz þeim til sátta sefi.

— "The fourth I sing, if the host of enemies lurk with cunning against your life. Then their souls will be bent to gentle reconciliation, their hearts turned to friendship."

As I mentioned above, in my opinion, this should be read as *inn fimta* "the fifth." The stanza corresponds to stanza 5 in Lióðatal. In Grógaldr, which only exists in late paper manuscripts, there may have been a slight rearrangement, whether due to poor memorization or a clerical error, which people thought they could correct by changing the order of the stanzas. I have commented above, in § 40, 5, on the magical power of the number five to stop spears, etc. In § 44, 2, we shall become acquainted with an Anglo-Saxon magic spell against spears, in which the magical sum of words contains the number five.

5. Þann gel ek þér inn fimta: ef þér fiǫturr verðr borinn at boglimom, leysigaldr læt ek þér fyr legg of kveðinn, ok støkkr þá láss af

limomThe fifth line, probably added later, is omitted here and in the interpretation.

— "The fifth I sing, if shackles are placed on your limbs. I will then utter the words that will release you. Then the binding bonds will break."

There is a striking similarity here with the fourth stanza of Lióðatal. In my opinion, we should read *inn fiórða* "the fourth." Just as an Anglo-Saxon magic poem can be invoked in support of the claim that Lióðatal reproduces the correct number magic, so in the case of the number 4 reference can be made to the first Merseburg charm, whose concluding spell consists of 4 words intended to free one from chains (cf. § 43, 1 below).

6. Þann gel ek þér inn sétta: ef þú á sió kømr, meira, en menn viti, lopt og lǫgr gangi þér i lið saman ok lé þér æ friðdriúgrar farar.

— "The sixth I sing, if the sea threatens you more powerfully than men have seen. Calm and sea, gather together and give you a peaceful journey." The interpretation of the end of the stanza is very uncertain (cf. Åkerblom, op. cit., p. 166, note 1). However, it is already clear from the first half of the stanza that the sixth galder (i.e., in my opinion, a galder with the number 6 hidden in its word count) was a magical song that could calm the waves. By analogy with Lióðatal, we would have expected similar content in stanza 9. However, there was a god who was perhaps invoked more often than the wind god Odin when it came to voyages on the water, namely Njord, whose status as an original polytheistic god with power over the sea I discussed in the previous chapter and whose sacred number I have assumed to be 6 (cf. § 22). That Njord, whose home is mentioned as *Nóatún* 'the ship's farm', had

the sea and the ocean under his control is so clear that it hardly needs to be discussed. "He rules over the course of the wind and calms the sea and fire. He should be invoked with regard to sea voyages and fishing," says Snorre (Gylfaginning 22). Njord should in all likelihood be associated with the Lapps' Tjasolmai, who is considered to bring good luck in fishing, cf. Olrik og Ellekilde, Nordens gudeverden, p. 117. — In the astrological manuscript I referred to in note 1, p. 111, the sixth day of the month is mentioned as favorable for fishing.

7. Þan gel ek þér inn siaunda: ef þik sœkia kømr frost á fialli há, hrævakuldi megit þino holdi fara, ok haldiz æ lík at liðom.

— The seventh I sing, if shimmering frost falls on the mountains. Fast cold to death, your body will not perish; be glad that you are unharmed.

Although fire or heat are not directly mentioned, the correspondence with stanza 7 in Lióðatal is clear. In this case too, it must be a question of being able to control fire and heat through a galder, with the power of the number 7 hidden in its words: in this case, the number 7 protects against freezing. Compare the following Norwegian spell (consisting of 7 words) to get warmth and sunshine: *lova, lova lin, gud lad sola skin* (varom Olrik og Ellekilde, Nordens gudeverlden, p. 119)..

8. Þann gel ek þér inn átta: ef þik úti nemr nótt á niflvegi, at þvi firr megi þér til meins gøra kristin dauð kona.

— I, the eighth, sing, if you are seized by night on a dark path. But even the ghost of a Christian woman cannot harm you then.

Here, the correspondence with the corresponding passage in Lióðatal (stanza 8) is not immediately apparent. In both cases, however, it is probably a question of the protective power of the fixed stars (the eighth sphere).

9. Þann gel ek þér inn níunda: ef þú við inn naddgǫfga orðom skiptir iǫtun, máls ok manvits sé þér á munn ok hiarta gnóga of gefit.

— "I, the ninth, sing, if you exchange words with mighty fortune. From Mime's soul, wisdom and eloquence will then be given to you in abundance."

Here it is even clearer than in stanza 9 of Lióðatal that this is a question of magic using the language of sorcery. Eloquence and wisdom distinguished Odin above all as the god of runes. The Eddic poem Vafþrúdnismál describes how he overcomes a mythical figure skilled in magic.

42. From the hints in the two Edda poems analyzed above, it seems clear that in the ancient Norse magic poems, the so-called galdrar, a certain adaptation to magically significant numbers must have taken place. The question now is what this adaptation might have consisted of. Since the galdrar are undoubtedly very ancient in origin and, even after the advent of runic writing, seem to have been recited without any associated carving of the words in wood or stone, we must assume, as I have already indicated, that the material, arranged according to certain numerical principles, was the actual word mass. 641., we must assume, as I have already indicated, that the material, arranged according to certain numerical principles, was the body of words itself. The poems were probably recited in groups in certain fixed stanzas, whereby the number of words in each stanza was chosen

with regard to the fact that, when added together, a certain number significant for the magical purpose would arise. That a certain number of words played a role in spells

is well attested. We have an instructive example in the Kalevala (songs 16 and 17), where it is recounted how Väinämöinen searched for three missing magic words. In witch trials, at least one witness has testified that a witch read an incantation in three parts, pausing at three points so that the whole thing fell apart into three parts (cf. Ohrt, Danmarks Trylleformler 1, no. 985). Counting words when composing magical formulas seems to have been practiced here and there until quite recently. This appears to be the case with the following Danish formula against dislocation (recorded in modern times):

Jesus rode down the mountain, the foal's hoofs trod in the field. I sign you with my 10 fingers and my 12 angels of God.

The verse consists of 10 words, followed by a blessing of 12. This could be explained as a coincidence, were it not for two magical formulas for "appeasing the wrath of enemies" that differ greatly from the quoted rhyme, in which 10 fingers and 12 words of God are mentioned, each consisting of 66 words and thus exhibiting a total number of words in which the number 22 (10 + 12) is hidden. Cf. Ohrt, Danmarks Trylleformler 1, no. 10 and no. 831 (*St. Peder* and *St. Pouel*, as well as *Sant Peder* and *Sant Povel* in the variant, must of course be counted as single words; it is not very likely that the reader would have paused after *Sant*).

Before we proceed to an investigation of what the Nordic tradition may have preserved of spells and incantations, it seems

necessary to take a look at the remnants of incantatory poetry among other Germanic peoples. We may well fear that the material we have to work with is not particularly extensive, insofar as we wish to confine ourselves mainly to poems of indisputably ancient character.

43. What those familiar with ancient Germanic literature will find most appealing in our investigation is the evidence we have in the so-called Merseburg spells (die Merseburger Zaubersprüche), which we can rightly call "galdrar" with Ivar Lindquist. The style of these poems has been analyzed in a very commendable manner by the aforementioned scholar in his imaginative dissertation "Galdrar, de gamla germanska trollsångernas stil undersökt i samband med en svensk runinskrift från folkvandringstiden" (Galdrar, the style of the old Germanic magic songs examined in connection with a Swedish runic inscription from the Migration Period), Göteborgs Högskolas Årsskrift (1923), vol. 29, 1. — With regard to the arrangement of the two magic songs, I agree with this work. The text is according to Sievers' edition (Halle 1872).

1. The first Merseburg charm seems to consist of three stanzas: (1.) Eiris sazun idisi, sazun hera duoder. (2.) Suma hapt heptidun, suma heri lezidun, suma clubodun umbi cuonio (?) uuidi. (3.) Insprinc haptbandun! Inuar uigandun (?)!

Two obviously corrupted words (indicated above by question marks in parentheses) are interpreted by Lindquist as *cuonie* and *uuigbandun*. In connection with him, the interpretation of the whole is as follows (cf. ibid., pp. 15 ff. and p. 41):

"(1.) First sat the noble women, then sat the fair women.

(2.) Some tied chains, some held back the army, but some loosened the chains of the brave men.

(3.) Run away from the restraining chains! Flee from the strong chains!"

If we read the poem carefully, we can be in no doubt that it is the third stanza that contains the actual magic spell, the words that, when uttered, break the chains:

Insprinc haptbandun! Inuar *uuigbandun!

These words are **four,** and the number four is mentioned in Odin's magic songs as having the power to break chains (cf. § 40, 4 above). In this context, we can recall the first line of the so-called "Pariser Spruch gegen Fallsucht" (Parisian spell against epilepsy): *Doner dûtîgo die êwigo!* ("Gütiger Donner, ewiges Wesen"). These four words sound like an ancient magic formula from pagan times (cf. Weber, Die Religion der alten Deutschen (1926), p. 39). As I pointed out in the previous chapter (§ 20), 4 must have been Thor's sacred number. On the Glavendrup stone, the final words have been interpreted as a poem, which Wimmer (Die Runenschrift, p. 378) renders as follows: *Þorr wígi pássi rúnaʀ! At rétta sá werði, es stæin þannsi ælti eða æft annan dragi!* It is probably no coincidence that each line of this Thor poem contains four words (cf. § 67, 9).

As regards the number of words in the Merseburg Galder mentioned above, I believe that it originally consisted of 20 (i.e. 5 × 4) words: the first stanza probably had 3 + 3 words, the second 3 + 3 + 2 + 2 and the third 2 + 2. This conclusion is reached if the last half-line of the second stanza is assumed to have consisted of *umbi* and a single word corresponding to the

Old High German *kunawithi* (*kunwidi*) 'chain' (cited by earlier researchers).

2. The second Merseburg Charter also clearly consists of three stanzas:

(1.) Phol ende Uuodan uuorun zi holza. Du uuart demo Balderes uolon sin uuoz birenkict. (2.) Thu biguol'en Sinhtgunt, Sunna, era suister, thu biguol'en Friia, Uolla, era suister, thu biguol'en Uuodan, so he uuola conda: (3.) "Sose benrenki, sose bluotrenki, sose lidirenki, ben zi bena, bluot zi bluoda, lid zi geliden sose gelimida sin!"

In Lindquist's interpretation (ibid., p. 43):

"(1.) Phol and Wuodan went into the forest. Then the foot of the Lord's sheep was twisted.

(2.) Then Sinthgunt and Sunna, her sister, cried out over him, then Friia and Volla, her sister, cried out over him, then Wuodan cried out over him, as best he could:

(3.) If it is a bone injury, if it is a blood injury, if it is a joint injury, then let bone be with bone, blood with blood, joints with joints, as if glued together!" If we now examine the word relationships in this elaborate old incantation, it appears that the third stanza, the actual spell, to which the rest is an introduction, consists of **18** words. What could be more natural from a mystical point of view than that the spell uttered by Wodan (Odin) to heal the horse should consist of 18 words, thus containing the magical number of this god and the horse's runes (cf. § 32). An examination of the meaning of the preceding verses finally yields the following: If *biguol* is counted as two words (the enclitic *en* goes back to an older *ina,* which as a two-

syllable word certainly formed a separate unit in earlier times), the two introductory stanzas together should have consisted of 36 words (14 + 22) = 2 × **18** words. The entire galder should thus have consisted of 3 × **18** words.

44. Among the Anglo-Saxon linguistic monuments, a series of magical incantations has been preserved. These certainly do not seem to be as original as the Merseburg charms, but they may nevertheless conceal traces of ancient charm-like poetry:

1. In a longer healing formula against "witch shots"Bibliothek der angelsächsischen Poesie, begr. v. Grein, herausg. v. Wülcker, 1, p. 317 ff. I follow the spelling of this edition, but Lindquist's arrangement. In accordance with the above, however, I use g instead of ʒ. Ivar Lindquist has sought to distinguish two different galder poems, which have merged in the tradition that most closely forms the basis for the recording. The longer of these poems shows a remarkable similarity to the second Merseburg charm just discussed. Lindquist has arranged it as follows (cf. Galdrar, p. 46): (1.) *Gif ðu wære on fell scoten, oððe wære on flæsc scoten, [oððe wære on blod scoten] oððe wære on lið scoten: [næfre ne sy ðin lif atæsed!]* (2.) *Gif hit wære esa gescot, oððe hit wære ylfa gescot, oððe hit wære hægtessan gescot: [now I will help you.]* (3.) *This is to pay for the horse, this is to pay for the elf, this is to pay for the magic: [I will help you.]*

Lindquist considers the text in small print within brackets to be later additions. In the rest of the text, he sees the original payment and translates it as follows: "(1.) Whether you have been shot in the skin, or you have been shot in the hollow, or you have been shot in a joint, (2.) whether it is the shot of the Idis, or it is the shot of the Alvars, or it is the shot of a witch, (3.) (this)

is your penance for the shot of the idisers, this is your penance for the shot of the alvs, this is your penance for the shot of the witch." The third stanza, upon the recitation of which the healing is clearly to take place, bears a striking resemblance to the corresponding stanza in other Merseburg galdern. A word count shows that even in the Anglo-Saxon charm, the final stanza consists of **18** words, if we, like Lindquist, disregard "*ic ðin wille helpan*" as a later addition. If we look at the two preceding parts of the poem, these consist of 31 words in Lindquist's reconstruction. However, if we include one of the three emended lines in this section (each consisting of 5 words), we also get 36 = 2 × **18** words — i.e. exactly the same ratio as in other Merseburg galders. I therefore find it possible that Lindquist, in his attempt at reconstruction, accidentally removed one line too many. After reviewing my investigation in the manuscript, Lindquist has submitted the following noteworthy new proposals for reconstruction (additions are indicated with quotation marks, deletions with ‹ ›):

Gif ðu wære on fell scoten, ‹oððe› "gif ðu" wære on flæsc scoten, ‹oððe› "gif ðu" wære on lid scoten,

Gif hit wære "ðe" esa gescot, "oððe" "gif" hit wære "ðe" ylfa gescot, "oððe" "gif ðu" wære "ðe" hægtessan gescot:

Þis ðe to bote esa gescotes, ðis ðe to bote ylfa gescotes, ðis ðe to bote hægtessan gescotes.

Each stanza would then consist of 3 × 6 = 18 words. Compare the correspondence between *sose ... sose ... sose ...* in other Merseburg charms and *gif ... gif ... gif ...* in the reconstruction of the Anglo-Saxon healing charm. That a

healing charm, preferably one for warding off the effects of magical throwing weapons, should contain the magical numbers of Odin, the god of magic and spears, is to be expected.

2. Another galder, or at least a spell or remnant of a more extensive magical poem, which LindquistJfr Galdrar, p. 34. has extracted from the same Anglo-Saxon healing formula, is this: (1.) *Syx smiðas sætan, wælspera worhtan.* (2.) *Ut, spere! Næs in, spere!*

D. v. s. "(1.) Six smiths sat and worked on deadly spears. (2.) Out, spear! Not in, spear!"

Here we see that each stanza consists of **5** words. This could, of course, be a coincidence. However, if we recall the fifth stanza of "Odens trollsånger," we cannot help but see something intentional here. In the Icelandic stanza, it is also a matter of stopping an enemy spear (cf. § 40, 5), and I have already discussed the apotropaic power of the number five in magic in my treatment of this poem and earlier (§ 21).

3. In an Anglo-Saxon incantation to prevent bees from flying into the forest when swarming, the following two verses appear: Cf. Bibliothek der angelsächsischen Poesie, begr. v. Grein, herausg. v. Wülcker, 1, p. 320.: (1.) *Sitte ge, sigewif, sigað to eorþan! næfre ge wilde to wudu fleogan!* (2.) *Beo ge swa gemindige mines godes, swa bið manna gehwilc metes, eþeles.*

The first stanza can be interpreted as: "Sitten, well-born swallows, sink to the earth! You shall not fly to the forest!" The second stanza is more obscure, but the meaning is clearly to promise the bees food (*metes*) and a suitable place to live (*eþeles*). In Grein-Wülcker's edition, an *and* has been inserted between

metes and *epeles* in the second stanza. In my opinion, this addition to the manuscript is unjustified. The two verses, as they appear in the old transcription, each consist of **12** words. We have learned above that 12 is the number of the earth. The first stanza also contains the expression *to eorpan*, and the spell begins with an exhortation to take some earth and throw it under the right foot with the right hand when uttering the magic words. It is likely that the first half of the spell, omitted here, also consisted of 2 × 12 words. Here, the insertion of three *and* has brought the number of words to 26. Two of these insertions are probably unnecessary. If we content ourselves with adding *and* in one place, this section will also consist of 24 words.

4. A line of Anglo-Saxon incantation formulas for pregnant women has also been preserved in writing. Cf. Bibliothek der angelsächsischen Poesie 1, p. 326 f.. Two of these consist of 21 words. Here, numerology with the lucky number 7 (21 = 3 × 7) may be present, or the god Ing may have been invoked, whose sacred number was 21 (cf. § 35) and who was worshipped as a god of fertility. A third of these magic poems reads, together with its prosaic introduction:

And when the woman with the child went to her husband to rest, she said: Up I will go, over the step with a living child, not with a dead one. Probably stands for cwelendum, cf. the interpretation.

D. v. s. "And when the woman is with child and she goes to rest with her husband, then she may lament: Up must I stand, over you must I step with a living child, not with a dying one, with a full-term one, not with one doomed to death!" This stanza, which clearly forms a separate unit, consists of **17** words. Earlier, I have pointed out a number of facts that give us reason

to believe that the seventeenth rune was sacred to Frigg (cf. § 31 and § 40, 17). We know that this goddess was invoked by those who desired offspring (cf. Golther, Handbuch der germanischen Mythologie, p. 432). Her entire character made her, moreover, suited to be a protective deity for the female sex. Frigg's sacred number must have been 17. That an incantation with a clear reference to a happy outcome of a pregnancy consists of 17 words is therefore exactly what one would expect. In run magic, we find examples of the use of the same magical number in inscriptions on objects that were clearly worn by women (cf. § 67, 22 f.).

45. After these two digressions concerning certain remnants of magical poetry among the continental Germans and Anglo-Saxons, we must turn to what remains of Old Norse galder poetry and incantations. If we encounter adaptations to certain numbers here as well, it is unlikely that we are dealing with mere coincidences.

1. The most detailed poems of a galder-like character that have been preserved are inserted in the Bósa saga. This was written down quite late, but this circumstance need not exclude the possibility that the poems included in it may be the work of pagan folk belief. Alliteration and meter may have protected these from any significant distortion. Furthermore, it is possible that if they were written by the storyteller, he was so familiar with the technique of ancient Galder poetry that he applied its rules. The saga tells:

When Bóse and his friend Herrauðr are threatened with death, the sorceress Busla, who is skilled in magic, forces King Hringr to renounce his decision. In the evening, Busla entered

the house where Hringr was sleeping and recited a long magic poem consisting of three sections, with pauses between them. The third and last section is said to have had the greatest magical power ("*mestr galdr*"). The first section consists of no less than seven fairly long stanzas. The whole thing is too complicated to quote here; those interested are referred to Jiriczek's edition of the Bósa saga (Strasbourg 1893), cf. Finnur Jónsson, Den norsk-islandske Skjaldedigtning B. 2, p. 350 ff. For those unfamiliar with Icelandic, a brief summary of the content may suffice. After an invocation to the sleeping Hringr in stanza 1, stanza 2 begins with an incantation: "(2.) Hear Busla's prayer, soon it will be sung, so that it may be heard throughout the world, bringing misfortune to all who hear it, but worst of all to the one to whom I read it. (3.) May the spirits go astray, may something terrible happen, may the cliffs tremble, the world shake, storms rage, if you do not give peace to Herrauðr and protection to Bóse! (4.) Your heart shall be gnawed by worms, your ears shall no longer hear, your eyes shall pop out of your head, if you do not" etc. It is unlikely that each stanza in this long poem was intended to contain a certain number of words. It is likely that only the last stanza had a powerful magical number hidden in its word count, whereby the total number of words in the poem was in a certain numerical relationship to the mystical arrangement of numbers in the final stanza. If we examine the word count in the final stanza, we see that it consists of 2 × 18 words, i.e., the number of Odin's sons, combined with Odin's: *Sé þér i hvílu sem í hálmeldi, en í hásæti sem á hafbáru; þó skal þér seinna sýnu verra, en ef þú vilt við meyjar mannz gaman hafa villizt þú þá vegarins; eða viltu þulu lengri?* If we calculate the sum of all the words in the seven stanzas, we find that it is 206 (21 + 30 + 23 + 34 + 31 + 31 + 36),

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which is equal to 2 × 103. Since 103 is a prime number, the combination 206 is a genuine lucky number. The number 2 is also included in the sum of the words in the final stanza (36 = 2 × 18). This entire introductory sequence of stanzas thus appears to be aimed at invoking demonic help. Of course, I am not blind to the fact that in such an extensive poem as this, additions may have been made and certain words may easily have been lost — that this has indeed happened in one or two cases, as shown by manuscript variants —; I merely emphasize that it is by no means unreasonable that the editor (Jiriczek) has made the right choice and included precisely as many words as were originally contained in the seven stanzas.

The middle section of the magic poem consists of a single stanza, which reads:

Tröll ok álfar ok töfrnornir, búar, bergrisar brenni þínar hallir, hati þik hrimþussar hestar streði þik, stráJiriczek har stáin, which is probably a poorer reading than strá in Finnur Jónsson. stangi þik, en stormar æri þik, ok vei verði þer, nema þú vilja minn gjörir.

D. v. s. "Trolls, alvars, and sorceresses, high dwellers, mountain dwellers may burn your halls, rimtursar may hate you, horses trample you, Original *streði* has a coarser meaning, cf. Erik Noreen, Studiet i fornvästnordisk diktning, andra samlingen, p. 63. you, straws prick you, storms torment you, woe to you, if you do not do my will!" This curse poem, which was read aloud after the king had spoken after the first incantation, consists of 32 words, arranged so that the first three lines contain 16 words and the next two lines also contain 16 words. Here too, the demonic number 2 is clearly present, which fits well with the content. As for the number 16, I refer to § 40, 16; in later Nordic

magic, this number seems to have been used to cause division and destroy all bonds of affection.

After the king has spoken once more, Busla finally reads the concluding passage, which in the saga is called "syrpuvers" and in which the most powerful magic is said to be hidden ("*mestr galdr*"). It consists of the following stanza:*Komi hér seggir sex, seg þú mér nöfn þeirra öll óbundin, ek mun þér sýna: getr þú ei ráðit, svó [at] mér rétt þikki, þá skulu þik hundar í hel gnaga, en sál þín sökkvi í víti.*

D. v. s. "Here may six men come, tell me their names, all unbound, I will show you: if you do not guess correctly, dogs shall gnaw you to death, and your soul shall sink into hell." The saga manuscripts then list 36 runes of the younger type. One manuscript has seven ᛁ, clearly a mistake.

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These were probably uttered by the sorceress: *reið, óss, þurs, kann, maðr, úr; íss* etc. (6 times), *sól* etc. (6 times), *týr* etc. (6 times), *íss* etc. (6 times), *lögr* etc. (6 times). If we combine the words *svá at* to *svá(t)* in the third line in connection with a text variant, the stanza will consist of 36 words, the same number as the runic names in the runic poem. That this was the original state of affairs can hardly be doubted. Here too, the number of lines is included in the total number of words, 36 = 2 × 18. The number 36 is also = 6 × 6, and it is precisely a question of guessing six names (*seggir sex*). The solution should be: *ristil, aistil, þistil, kistil, mistil* and *uistil*.

The sum of the words in Busla's entire prayer is 206 + 32 + 36 + 36 (the runic name rhyme) = 310. The number 0 has been considered highly harmful (cf. § 26, § 45, 3 and § 61). — In the younger edition of BósasaganJiriczek, Die Bósa-Saga, p. 101 ff. there is also a magic poem, which, however, differs considerably from the corresponding parts in the older version. This poem also seems to have been constructed with a view to achieving certain magical numerical ratios: the first part consists of 130 words, the second, which begins with *Tröll taki þig*, of 82, and the third of 48 words. The middle section, whose words are directed at trolls and other demonic beings, thus consists of 2 × 41 words, i.e., a genuine demonic number combination (41 is a prime number). The first part consists of 10 × 13 words and the last of 2 × 24. The entire galder poem consists of 260 (130 + 82 + 48) words. As in the older version, we thus encounter a number ending in 0, a number that can bring death and harm. The number 260 is = 2 × 13 × 10 and thus recalls in its composition the number 390 = 3 × 13 × 10, which is hidden in the combination of symbols on the weaving shuttle carved in Lund for malicious purposes (cf. § 65, 2). This poem, at least when viewed as a whole, is even more likely than the galder in the older version to be the work of a relatively late period. If this is the case, which I believe it is, then the person who composed the poem in this way knew that such a galder would contain numbers of a certain type.

2. The Icelandic skald Egil Skallagrímsson was undoubtedly well versed in galder and run magic. In the saga about him, in addition to a magical incantation in prose, several poems have been preserved which were clearly written for magical purposes. Magnus Olsen has examined two of these with regard to the

number of runes (cf. § 1). According to the saga, another poem by Egil should be considered even more magical than these two poems, which I will also discuss below: At a banquet in the Norwegian royal court, the skald was handed a drinking horn filled with poisoned beer. Egil sensed the danger, took out his knife, and stabbed himself in the hand. Then he took the horn, carved runes on it, smeared them with blood, and recited: *Ristum run a horni rioðum spioll i dreyra þau vil ek orð til eyrna oðs dyrs uiðar rota drekkum veig sem vilium vel glyiaðra þygia vitum hve oss of eiri aul þat er barðr of signdi.* (quoted from F. Jónsson, Den norsk-islandske Skjaldedigtning, A 1, p. 49.) In A. U. Bååth's interpretation, this poem reads: "Carve runes on the horn, red were the staves in the blood! Mumble words of power, while I linger at the rim — Drink with pleasure the drink, the joyful one, that was given to us. We want to know how the beer works that Bård has given us." When Egil had said this, the horn broke in two, and the drink flowed down onto the floor.

It is clear from the wording of what was said that not only the carved runes, which probably constituted some kind of short formula, but also the poem recited had a magical meaning. It was only when the poem had been read to the end that the horn broke. If we now count the words in the Icelandic original, we can see that each half-stanza consists of **18** words. By coincidence, Bååth's interpretation also consists of 36 words (a 36-word poem in a Nordic language naturally has a good chance of also consisting of 36 words in another), but it does not consist of one half-stanza with 18 words and another with 18 words. A guarantee of the existence of intentional numerical mysticism is that the same relationship is repeated (cf. §§ 47–65). The poem was thus constructed in such a way that the words of Odin, the

god of drink and magic, appeared twice in it. The number 18 has also definitely been included in the runic formula. Egil was, as is well known, an Odin worshipper (cf. his poem "Sonatorrek").

Two curses that Egil composed against his enemies, King Erik and his queen, are also likely to be of a magical nature. The first reads (cf. F. Jónsson, op. cit., p. 53): Sva skylldu goð giallda gramr reki lynd af lavndum reiðr se rogn ok oðinn rán mins fiar hanum folkmygi lat flyia freyr ok niorðr af iorðum leidiz lofða styri landass þann er ve grandar.

In Bååth's somewhat free interpretation:

"The robber who has stolen my wealth, may the gods punish you! Angry enough, you can cast the king from you, Odin! The destroyer of the people fled, Frö and Njärd, from the kingdom! The hateful desecrator of holy places is hated by the spirits of the land!" (The last line in particular deviates from the meaning of the original.) If we examine the number of words in the Icelandic text, we see that the first half-stanza, which is an invocation to Odin, consists of 18 words. The correct reading of the second half-stanza is disputed; in any case, the words have probably been rearranged. According to the text edition quoted above, this half-stanza consists of 16 words. This fits well with the fact that Tor is invoked in the last line: *landáss* was primarily Tor in Norway. 4 was Tor's number, and a half-stanza of 16 words thus contained his number 4 times — just like the poem on the Glavendrup stone *Þórr wigi* etc. (cf. § 43, 1). The stanza as a whole, in the form in which I have quoted it, consists of 34 (18 + 16) = 2 × 17 words, the same number of words that Egil utters when he addresses the land spirits in his spell at the stake, cf. below.

The second poem reads (ibid., p. 53): Logbrigðir hefir lagða landalfr firi mer sialfum bleckir bræðra sokkua bruðfang vegu langa Gunnhildi a ek giallda greypt er hennar skap þenna vngr gat ek ok lé launa landrekstr bili granda.

In Bååth's interpretation:

"The longship led me astray, given to me by the king of the land. The lawgiver, the bane of brothers, incited the queen. Gunhild shall receive a good gift for her flight: I have rewarded treachery lightly with mighty torment." The entire stanza, in the reading I have followed above, consists of 31 words (13 in the first half and 18 in the second half, i.e., the words of Ull and Odin). The number 31 is a prime number. I have already mentioned that such numbers, which cannot be evenly divided by the number of the devil, have been considered to protect against witchcraft (cf. § 19). Queen Gunhild was, as is well known, highly skilled in witchcraft. In this context, we can recall the story of her relationship with the Icelander Hrut (cf. Nial's Saga, chapters 3–6). The type of word count and the actual circumstances therefore indicate that Egil wanted to protect himself from the evil intentions of the sorceress through this magical poem. The fact that the first half-stanza consists of 13 words and the second of 18 is also likely to be due to magical calculations, as the yew tree and its round shape were believed to offer protection against sorcery (cf. § 29), and the god of sorcery, Odin, was Egil's special guardian god.

Finally, a curse formula is preserved in the saga of Egil Skallagrimsson. Before Egil set sail from Norway after killing Erik's son, Ragnvald, he landed on an island, took a hazel rod in his hand, and went out to a mountain god who was facing the

land. Here he took a horse's head and placed it on the stick. Saxo recounts a similar sorcery ceremony to scare people out of the country, performed by Frode's hirdman Grep, cf. J. Olrik, Sakses Danesaga[2] 1, p. 231 f.. Then he uttered "certain words" (= an incantation): *Hér set ek upp niðstǫng ok sný ek þessu níði á hǫnd Eiríki konungi ok Gunnhildi drótningu* (= *17* words) = "Here I raise the niðstang and turn this nið against King Erik and Queen Gunhild." Then he turns his horse's head toward the land (hann sneri hrosshǫfðinu inn á land, says the saga), after which he continues: sný ek þessu níði á landvéttir þær, er land þetta byggva, svá at allar fari þær villar vega, engi hendi né hitti sitt inni, fyrr en þær reka Eirík konung ok Gunnhildi ór landi (34 = 2 × **17** words) = "I turn this curse against the land spirits who inhabit this land, so that they may lose their way and no one may reach or find their homes until they have driven King Erik and Gunhild out of the land." The saga continues: "Then he shot the pole into a crevice in the rock and left it there. The horse's head was turned toward the land, and he carved runes on the pole, and they contained the entire spell. Then he boarded his ship." Cf. F. Jonsson's edition, Altnordische Saga-Bibliothek, Heft 3, p. 189. Egil's spell consists, as I have indicated above, of 17 words, followed by a pause, during which he turns the horse's head toward the land. Then another 34 words are uttered, i.e., 2 × 17 words. By combining the prime number 17, the number of magic, with the number 2, he clearly intended to gain power over the land spirits. In Norway, "landvetter" were the underground beings who were believed to live inside the mountains and under the earth and who protected the country. See Alexander Bugge in Norges Historie 1 (Kristiania 1912), p. 199. In Landnámabók, it is said that Iceland's oldest pagan laws contained a provision

that ships should not be decorated with animal heads. However, if someone did have such a decoration on their ship, it had to be removed immediately when land came into sight. One was not allowed to approach land "with gaping heads and open mouths" so as not to "frighten the land spirits." This clearly explains why Egil turns a gaping horse skull toward land and utters an incantation against it. Horses also play a prominent role in Icelandic skaldic poetry, cf. Erik Noreen, Studier i fornvästnordisk diktning, second collection, p. 48 f. and p. 58 f., and for further references, see Schoenfeld, Das Pferd im Dienste des Isländers zur Saga-Zeit, p. 74 ff. Unlike Magnus Olsen, Om Troldruner, p. 20 f., I do not believe that it was the two poems directed against Erik and Gunhild that were carved into the pole. According to the saga, it was the incantation words quoted above that were carved into the nidstång. The fact that the number 17 is included in this incantation undoubtedly has a very special reason. It may be because the pole is a continuation of another magical instrument, the magical branch, and that the birch crown and its number represented this. However, 17 was also Frigg's number (cf. § 31). As the wife of the god of death, Odin, she probably had power over "the underworld" according to ancient Norse folklore. This was also the case with Frigg's counterpart among the South Germanic peoples, the goddess Bertha (Përchta), who with her army of elemental spirits ensured the fertility of the earth and, with their help, plowed the earth with her wooden plow. A variant of the same goddess figure, the goddess Stempe in Tyrol, has been thought in folklore to be a horse figure; in some places in Germany she is also called Mutter Rose, a name which Mannhardt has assumed to be a reflex of the Old High German *Hrosà* = 'mare' (cf. Mannhardt, Die

Götterwelt der deutschen und nordischen Völker 1, p. 289 and p. 299.

3. A runic poem preserved on a bone loom from Trondheim is undoubtedly of a magical nature. Cf. Magnus Olsen, Om Troldruner, p. 16 f.:

Unna-k meyju ek vil-at reꝗ Erlends fúla vif, ekkja hagaði.

Bugge, who first observed that the inscription consists of a metrical poem and reconstructed the Norse language form as indicated above, has given the following interpretation: "I loved Mön. I will not torment Erland's despicable wife, as a widow she would be useful (to me)." Here we are clearly dealing with a magical curse. The engraver believed that he could bring about a man's death through sorcery (cf. the words "as a widow"). The spell, written in verse form, consists of **10** words, which corresponds to the fact that the inscription consists of 40 = 4 × **10** runic characters:

5 10 15 20 25 30 35 40

unakmꜳyiu[ik]uilatriꝗꜳlensfulꜳuifꜳkiahaka͡pi.

To achieve this result, the two runes at the end, *k* and *a,* are combined into a bindruna. Both the words in the poem and the runic characters are thus adapted so that they conceal the number 10, which is attributed to a "cold," deadly power (cf. § 26). Cold and death were traditionally associated with each other in magic. One need only think of the late antique use of cold lead (taken from gutters and the like): the cold lead was supposed to make the cursed person "cold," i.e., kill him. Cf. Wünsch, Sethianische Verfluchungstafeln aus Rom, p. 71 f. In

this context, we should also recall the number of runes on the fateful whale bone under the headdress of the dying girl, the runic object that Egil Skallagrímsson tracked down and removed during his visit to the farmer in Värmland (cf. § 1): these runes were 10: Ten dark signs carved into the board hid. The woman has long caused torment and wailing." (A. U. Bååth's interpretation.)

4. In "An Icelandic book of black magic from the 1500s, published with translation and commentary by Nat. Lindqvist" (Uppsala 1921), there is, among other things, an incantation for "bewitching a woman and winning her love" (p. 57 ff.). It reads in Nat. Lindqvist's translation: "I look at you, and you give me desire and love with all your heart. [—| May you not be able to sit anywhere, may you not be able to thrive anywhere, if you do not love me. This I pray to Odin and all those who can interpret women's runes: That you may find no peace or comfort anywhere in the world unless you love me with all your heart. You shall feel it in your bones as if you were burning, and in your flesh half as bad. Misfortune shall befall you if you do not love me. Your feet shall freeze. You shall never win honor or happiness. You shall sit as if in fire; your hair shall rot; your clothes shall rot, unless you willingly give yourself to me." If you read the above carefully, you will find that the actual spell begins with the second sentence ("May you nowhere"), which begins after the dash in brackets, which I have inserted. Either the introductory sentence is a later addition (two spells have been combined into one), or a sharp pause has been made after the first sentence, so that the latter section forms a separate unit. This part reads in the original text and as transcribed by Nat. Lindqvist in verse lines: *sit þu huergi nie þrifist þol þu huergi nema*

þu elsker mig nema þu vner mijer af aullum hug þad bid eg Odin suo skall þijer i beinum og alla þa sem þu brener aull sem kuennrunir en i holldi kunnu ad rada halfu verra Ad þu i heimi hliot þu ogifttu huergi þoler nem a thou vner mijer a fætur Rotna thou hari skalltu friosa rifni thy klædi hliottu alldri sæmd nema audganngul nie sælu vilier eiga mig. sit thou brenandi The spell consists of 81 words, thus containing the magic number 9 exactly 9 times. This number has been intimately associated with the god of magic, Odin, who is invoked in the poem. The omitted opening formula consists of 15 words, thus containing the number of the sun rune, which in later Icelandic magic was probably associated with Frö as the god of the sun and love. The most likely explanation is that two different erotic incantations have been combined into one, similar to the fusion of Anglo-Saxon galdrar (§ 44). The style is also different in the two parts.

5. In "Íslenzkar þjóðsögur og æfintýri" by Jón Árnason (part 1, p. 164), it is told that King Olov Haraldsson, as a 5-year-old boy, was sailing on a ship with his foster parents close to a mountain beach. Then a sorceress came out of the mountain and asked if there was a skald on the ship. When they replied that there was none, she recited a curse with the following content: I am grateful to Lektor Jón Helgason in Oslo for his help in interpreting the Icelandic text. He has also provided me with valuable information about the language used in other Icelandic magic poems: "(1.) May sickness come, people lament, snow fall thickly and there be famine in many places; snow falls, the mountains are covered, people hate each other, people's livestock die. (2.) The earth is twisted, the sheep disappear, there are snowstorms, people's livestock are lost, hatred arises, food is scarce, people perish, and it gets even worse." — *Komi sótt,*

Gremjist hauður, kveini drótt, glatist sauður, kynngi hríð, gjöri hregg, og giöri sult viða; tappist fé seggja; hrynji mjöll, fáist hatur, hylji fjöll, firrist matur, hatist menn, farist her deyi fé skatna. and make it so.

Then the young Olov Haraldsson recited: Make rain, Grói hauður, give peace, gladden the sheep, give a good harvest, make a good year and bring men to their work; and let them be prosperous; melt the snow, bring rain, calm the sea, let the people live, let the cattle be fat, let the harvest be good, and let the tax collectors be satisfied. and make it even better.

He thus completely reverses what the sorceress wanted to conjure up: "(1.) May rain come, may the weather and the sea be calm, may good and accessible fishing be granted to the people, may the snow disappear, may the sea be calm, may hatred be destroyed, may men have a favorable wind. (2.) May the earth grow, the sheep rejoice, good lambs be born. The following line, which probably contains a mistake, can only be interpreted by guesswork. Lecturer Helgason does not currently consider himself able to offer any definite reconstruction. May the people live, winter recede, and may things become even better." "Then the sorceress cracked," is added, and with this explanation the story ends. We are clearly dealing here with a duel in magical verse. The sorceress's poem consists of two stanzas with 19 words in each. Since we know that the number of humans (the numerical value of the rune *m*) was 19, we can conclude that humans could be magically ensnared by a troll if their number (19) was combined with that of the troll (2). The answer that caused the sorceress to crack consists of 41 words, the sum of which forms a prime number that cannot be evenly divided by any number other than 1, the number of the helper rune.

An interesting parallel to this view is provided by a Norwegian folk tale recorded in recent times. In the story "Makrilldrag" (Mackerel Fishing), Asbjørnsen tells (cf. Lundquist's interpretation (Stockholm 1881), p. 207 ff., and Norske huldre-eventyr og folkesagn fortalt av B. Chr. Asbjørnsen. Fourth edition revised by Moltke Moe and Anders Krogvig (Kristiania 1914), p. 288 ff. how three sailors got rid of their three troll wives who wanted to destroy them. When these came flying one after the other in the form of ravens, each with its storm cloud, an armful of birch wood was thrown out for each one, "wood for wood, one at a time, never two." When an armful had been thrown, the first witch, with her conjured storm cloud, regained her female form and sank to the bottom with a deep groan. The same happened to the next two. If two pieces of wood had been thrown at once, the witch would have been able to retain her power. The fact that it had to be birch wood is certainly also of magical significance. The birch was, after all, the magical symbol of women (cf. § 31).

6. In the same work by Jón Árnason (part 1, p. 461 ff.), five magical poems are given under the heading "Vísur til að herða stefnu og fæla með djöfulinn" (Poems to ward off evil spirits and fight the devil). For reasons of space, I cannot reproduce them here, but refer the interested reader to the Icelandic publication.

The first poem, which begins: *Undan vindi vondan sendi* ("May evil be cast away with the wind") and bears the title *Draugaþáttur*, consists of two half-stanzas, each containing 17 words, thus making a total of 34 (= 2 × 17) words. The ratio of syllables is the same as in Egil's spell against the land spirits (cf. above, item 2: *sný ek þessu niði á landvéttir* etc.).

The second poem is called *Tröllaþáttur* and begins: *Fjandi, andi flár, grár* ("May the devil, the insidious, gray spirit flee," etc.) and appears to be constructed according to a very specific mathematical scheme in terms of the number of words. If we count the word formation *seið-sullum* as two units, it turns out that the poem consists of three four-line stanzas, each containing 16 words, followed by two lines containing a total of 8 words. The incantation thus consists of 56 = 7 × 8 words. The poem is clearly adapted specifically to the number 8. We have come to know its protective power in, among other places, the eighth mystical stanza of "Groas trollsånger" ("Göra dig men ej mäktar ens vålnad av kristen kvinna då" [You cannot harm me, not even the ghost of a Christian woman]). The magical origins of the number eight can be traced back to the late antiquity ogdoad (cf. § 24 and § 48).

It is difficult to comment on the third poem, as it has a variant that contains a different number of words. The fourth is entitled *Dvergmál* and begins: *Saur-anda vondum — svíði nú vid stefnu striðið* ("May the evil spirit of filth now feel pain at the torment of the spell"). It is quite clear that the words in this poem have been arranged according to a certain mathematical scheme. If the fifth line from the bottom, which is twice as long as the one immediately preceding it, is divided into two (*sem sandur er í sjó,* and *og sveinar útróa*), the poem consists of 15 lines. These in turn consist, if we count a word combination (*saur-anda*) as two units, of 75 = 5 × **15** words. One can clearly see how the number 15 has been sought: first come 3 lines consisting of 15 words, then 3 lines consisting of 16, then again 3 lines with 15, followed by 3 lines with 14, and the end is formed by a formula containing 5 words: *Álög fylgi nú mínu máli* ("Binding

power, follow now with my words"). This line is repeated three times, creating a new group of 15 words. It is clear that the author of this magical incantation dictated according to the pattern 15 + 15, etc. When he found himself with 16 words in one case, he evened out the excess at the first opportunity by allowing a group of three lines to consist of 14 words, so that the whole became 5 × 15 words. The fact that the number 15 is considered to be the most magically effective in an incantation directed against dwarves and other underground beings is explained quite naturally by the fact that in runic magic, 15 was the number of the sun (cf. § 18). What dwarves and their ilk feared most of all was the sun, for at its sight they met their doom (cf. the Edda poem Alvíssmál and a variety of Nordic folk tales).

The fifth poem is called *Herfjötur,* which means "binding of an army" or "panic during battle." Cf. Neckel, Walhall, pp. 75 and 83, and Ivar Lindquist, Galdrar, p. 19 (with references). Strangely enough, this poem contains several Christian elements (there is talk of conjuring "in the name of God," "the son's terrible torment," etc.). If we count a compound word (stefnu-orð) as two units, in line with the above, this incantation consists of 36 = 2 × 18 words. Whether this was a healing formula or protection against an attacking enemy, the use of the Odin number is entirely understandable from a magical point of view. The use of magic numbers in pagan sorcery has undoubtedly survived the Aesir religion and been more or less distorted and adopted in later times, when God and Jesus were inserted into spells instead of Odin (cf. point 8 below).

7. In "Íslenzkar gátur, skemtanir, vikivakar og þulur," published by J. Árnason and Ó. Daviðsson, in part 4, p. 95 ff. and in Huld 5, p. 22 ff., there are some recordings of galder-like poems. As my attention was drawn to this material too late, I can only provide a few hints here. — The first-mentioned collection contains, among other things, a magic poem for summoning blood (p. 95), the sum of the words in which is $38 = 2 \times 19$ (the number of humans). As an analogy to this, Ohrt, Danmarks Trylleformler 2, p. 132, mentions a runic formula that is to be written "on a man's forehead with his own blood" — these runic characters are 19. The significance of the number 2 in medicine has been pointed out in § 40, 2. — The poem in "Dýrastefna" (p. 99) consists of 127 words, a prime number; it was probably intended to counteract witchcraft. — The poem in "Tóustefna" (p. 99 f.) consists of 97 words, also a prime number. — The formula *nema þú mér* etc. in "Þjófastefna" (p. 102) consists of $52 = 4 \times 13$ words. — The first stanza of "Særíngavers" (p. 103 f.) consists of 47 words, a prime number; the second stanza of 40 words. — Stanzas 1–3 in "Kvæði" (p. 107) each consist of $57 = 3 \times 19$ words. — The 13 magic poems in Huld 5, p. 22 ff. show the following word totals: 1) $77 = 7 \times 11$, 2) $52 = 4 \times 13$, 3) 89, a prime number, 4) $52 = 4 \times 13$, 5) 73, a prime number, 6) $54 = 6 \times 9$, 7) $44 = 4 \times 11$, 8) $111 = 3 \times 37$ (prime number), 9) 61, a prime number, 10) $91 = 7 \times 13$, 11) $86 = 2 \times 43$, 12) $63 = 7 \times 9$, 13) 103, a prime number. Since the 13 poems are intended as protection against witchcraft and evil forces, it is certainly significant that most of the numbers are prime numbers or multiples of 13. Poem no. 4 consists of three four-line stanzas with 16 words in each, to which another line of 4 words has been added. It is highly probable that the poems were written with a view to

achieving certain numerical ratios in terms of the number of words. I am unable to offer a detailed interpretation at present.

8. As we have already seen from several examples, word counting in magical poems and formulas seems to have been in use long after pagan times. The large collections of spells that have been compiled should therefore provide significant comparative material. This is undoubtedly the case, but such material cannot be used without further ado. There have, of course, been spells in post-pagan times in which the principle of word counting has not been applied at all. In the course of centuries, certain words may have been lost and new additions made. Finally, when communicating a magic spell, certain words may have been omitted deliberately, as the spellcaster believed that otherwise its magical power would be lost. "A difficulty of a special kind for song collectors arises in Finland and Russian Karelia, the land of magic spells; it is the spellcaster's fear of revealing his wisdom. Sometimes he fears punishment by the authorities, but often the believing magician is afraid that the verse will lose its power when another man learns it; even when he recites his song, he usually omits certain words" (Ohrt, Kalevala 2, p. 112). We have every reason to be skeptical of records made under torture and other coercion during the 16th and 17th centuries; in most cases, it is quite likely that not all of the words were recorded. However, I have already indicated with a few examples that some of the material may have been taken from magical formulas from a later period (cf. § 42).

A few observations made while reading Ohrts Danmarks Trylleformler can be added here: Formula no. 788 ("Cross in Stavn — in the name of Jesus") contains six words and is

supposed to bring good luck in fishing (cf. § 41, 6). Formula no. 986 ("far hen i den onde Mands Navn til" + the name of a cardinal direction) contains nine words and is supposed to bring about a change in wind direction (cf. § 40, 9), as is formula no. r 612 with the same purpose, if two words written together are separated ("Raer du i-daw, så raer æ i-mårren"). Formulas no. 774 and no. 775, intended to calm horses, both consist of 13 words (if the addition "I Navn" is excluded from the first). Formulas n:r 1032 and n:r 1033, both directed against witchcraft, consist of the former of 2 × 13 words before "Amen," the latter of 3 × 13 words, n:r 1265 (against ghosts) of 13 words. Formula no. 880, intended to make a woman fall in love, consists of 19 words (cf. § 58). A harmful formula (cf. above, item 3), consisting of 10 words, is this: "Nu sette wi ald fru Annes lycke och welfert neder" (no. 979).

Also of interest in this context is a þula-like "reggla" about the farms in a Norwegian parish, reported by Magnus Olsen, Ettegård og helligdom, p. 13, which ends: "In Leirvik, they are thieves all their days." This rhyme seems to be of a magical nature. When counted, it consists of 18 + 18 words (8 lines form a group of 18 words, and 6 lines form another group of 18 words). I assume that the purpose of the poem was to protect against thieves. Odin, whose number is 18, seems to have been invoked in spells against thieves (cf. e.g. Nat. Lindqvist, En isländsk svartkonstbok, pp. 57 and 71). I consider it impossible, for reasons I have already emphasized, that all or even most of the Nordic spells recorded since the beginning of modern times can be explained by the old magical number relationships in Old Norse galdrar and incantations. However, it seems quite likely that a certain connection existed. If this connection did exist, the

original numerical relationship must have been preserved in a few cases.

I have pointed out on several occasions that the material we have had to work with in this chapter is extremely difficult, and I would like to emphasize this once again. However, the ancient Germanic number mysticism can be studied through much more reliable material—the preserved remains of magical inscriptions with older runes. Here we are not dealing with a series of transcriptions and copies, but with originals. We will deal with these in the following chapter. It will become apparent that we can benefit in many respects from the obscure and uncertain hints provided by the Galder poem.

*

CHAPTER IV

THE LETTER MAGIC OF THE ANCIENT GERMANIC RUNE INSCRIPTIONS

46. Based on what has been developed in the two previous chapters, we can arrange the older runic alphabet in accordance with ascending numerical values as follows: 1. ᚢ 2. ᚦ 3. ᚨ 4. ᚱ 5. ᚲ 6. ᚷ 7. ᚹ 8. ᚺ *u þ (th) a r k g w h* 9. ᚾ 10. ᛁ 11. ᛇ 12. ᛈ 13. ᛉ 14. ᛏ 15. ᚼ 16. ↑ *n i j p (z)* ʀ (*ř*) *s t* 17. ᛒ 18. ᛗ 19. ᛘ 20. ᛚ 21. ◊ 22. ᛩ 23. ᛤ 24. ᚡ *b e m l* ⊠ (*ng*) *o d f*

The sound value of rune no. 2 has been the same as the voiceless English *th*. In transcription, I render it in the following with *þ*. Runes no. 6, 17, and 23 have in all likelihood been fricative sounds, and could therefore, strictly phonetically, be most appropriately designated with *ᵹ, ƀ*, and *ð*. For simplicity's sake, however, I use *g*, *b*, and *d*. Rune no. 7 was certainly a bilabial *v*, so I render it with *w*. Rune no. 13 is problematic in terms of its sound value. In the previous section (cf. p. 82), I have put forward the hypothesis that it got its name from the final sound in the word *ˈīwaz* and thus denoted a voiced s sound. When this *z* sound changed over time to a *ž* sound (tonal *sj* sound), it coincided with the sound value of rune no. 14, after which this *ž* sound finally acquired approximately the same pronunciation as the Czech *ř;* in Scandinavian, a tongue-tip *r* subsequently arose. I transcribe rune no. 14 with ʀ, but leave unsaid at what stage of development *ž — ř* its pronunciation may have been at the time in question. Rune no. 21 has probably, like

the Greek γγ, been a sign for a double sound, an *äng* sound + a *g* sound. I transcribe it in the following with ⊠.

Regarding the order of the signs, there may be some doubt about nos. 12 and 13, as well as nos. 22 and 23. The first two signs are extremely rare in runic inscriptions. However, with the support of Odin's magic songs and an Anglo-Saxon incantation formula (cf. § 40, 12 f. and § 44, 3), we can establish with a high degree of probability that that ᛉ = 12 and ᛢ = 13, although the signs in most futhark rows have been reversed for magical reasons (more on this below). With regard to the order of the two runes at the end of the futhark row, we can clearly show, with the support of a number of runic inscriptions, which will be discussed below, that the calculation method ᛉ = 22 and ᛗ = 23 is correct. Only on the Kylverstenen stone is there a reversal of the signs. I will explain this satisfactorily below (cf. § 49).

I will now proceed to examine a series of runic inscriptions of an older type, where undamaged characters or other graphic difficulties do not pose insurmountable obstacles to a gematric interpretation. With one or two exceptions, I will leave inscriptions with the so-called younger runic row out of the calculation. Only after we have become thoroughly familiar with the magical methods of the older runic script can we proceed to an investigation of the younger one. Among the inscriptions of the latter type, the vast majority are clearly not of a magical nature, whereas, on the contrary, the opposite is true of inscriptions made with the characters of the older runic alphabet. With regard to the most ancient of these inscriptions, one may even wonder whether all or almost all of them were made by people knowledgeable in magic. In some cases, this may have

played a negative role, i.e., the carver may have ensured that no combination of signs harmful to the owner was affixed to an object. In other cases, however, an examination of older runic inscriptions reveals such a complex type of gematria that the magical character of the carving must be considered beyond doubt. Inscriptions of this type are primarily useful as evidence of the techniques of the oldest runic magic. I will therefore begin my investigation with a series of such inscriptions.

A. INSCRIPTIONS OF UNQUESTIONABLY MAGICAL CHARACTER WITH VIRTUOSO GEMATRIA

47. The golden horn with runes from Gallehus was, as is well known, found at the aforementioned location near Mögeltönder in Schleswig in 1734, only a few steps from a place where a peasant girl had found a similar horn without an inscription in 1639. Both horns were stolen from the Royal Art Chamber in Copenhagen in 1802 and immediately melted down by the thief. We therefore now only have the old illustrations and descriptions to go by. Fortunately, however, the runic inscription was so clearly engraved that we have no reason to doubt a single rune as regards its form. The runic inscription (cf. fig. 11), which runs along the upper edge of the horn, consists of the following characters: ᛖᚲᚢᛁᛖᚠᚱᚷᚨᛋᛏᛁᛉ᛬ᚢᛜᛚᛏᛁᛃᚱᛇ᛬ᚢᛜᚱᚨ ᚨ᛬ᛏᚱᚠᛁᛗᚢ᛬ e k h l e w a g a s t i ʀ h o l t i j a ʀ h o r n a t a w i d o and interpreted (cf. NoreenMed the literature reference " Noreen" in this chapter refers to Adolf Noreen, Altisländische

und Altnorwegische Grammatik, 4th ed. (Halle 1923), p. 379): "I, Hlewagastiʀ (Hlégestr) from Holt, made the horn." Despite the simple wording, we have every reason to expect a magical inscription. On the "I" formula in magic, cf. Feist, Journ. of Engl. and Germ. Philol. 21 (1922), p. 601 ff. It is likely that both gold horns were sacrificial vessels. However, if they were originally intended, as I believe, to serve as drinking horns in the home of a Norse magnate, a magical purpose for the inscription is also highly likely. Among the ancient Norse, the drinking horn was associated in many ways with sacred customs: it was used to empty the memorial cup, to drink to the gods at great feasts, and to make vows. It was a powerful symbol of the connection with the protective gods of the clan. Cf. Grønbech, Vor Folkeæt i Oldtiden 4, chap. "Omkring Ølbollen" (About the Beer Bowl), and the same author in Illustrerad religionshistoria (Illustrated History of Religion), ed. by Lehmann, p. 503. What we know about the horn's precious material and its unusual decoration allows us to guess at an object of more than ordinary magical significance. Cf. the figures on the golden horn, most recently Ivar Lindquist, Namn och bygd 14, p. 82 ff. Below the inscription, in one of the rings enclosing the belt below the other, there were a number of images depicting human figures, animals, and stars. The ornamentation, with its mixture of animals, human figures, and stars, bears a strong resemblance to the amulets of the Mithraists (cf. e.g. figs. 402, 408, and 411 in T&M. 2, the first of which is reproduced as fig. 6 in this work). If we now examine the ratio of the ornaments within the belt immediately below the runic inscription (cf. fig. 11), we see that there are 39 images in total, i.e. 3 × **13.** Within these, the number 7 appears in many ways: we see **7** sharply defined figures in the

foreground (4 armed male figures, two dogs, and one deer); seven weaker (through punctuation) animal figures; and finally, among the 25 star ornaments, there are seven stars with seven points (four on the lower left edge, one on the far right lower edge, and two near the center of the upper edge). The numerical symbolism of Mithraism thus seems to be reflected in a variety of ways.

If we now turn to a gematric examination of the runic characters in the inscription, we find the following: The first group of runes, *ek hlewagastiʀ*, consisting of **13** runes (since no punctuation marks have been added after *ek*), has the numerical value 143, which is 11 × **13** (18 + 5 + 8 + 20 + 18 + 7 + 3 + 6 + 3 + 15 + 16 + 10 + 14). The second rune group *holtijaʀ*It is interesting to note that the sixth rune in this word should be read as a *j* and not, according to the older opinion now abandoned by most researchers, as ⊠ (*ng*). has the numerical value 104, which is 8 × **13** (8 + 22 + 20 + 16 + 10 + 11 + 3 + 14). The third rune group, *horna*, has the numerical value 46 = 2 × 23 (8 + 22 + 4 + 9 + 3). As we shall see below, the number 23 has a special magical significance. It occurs particularly in grave inscriptions and was probably considered to scare away demons (the name of the rune meant "day, light"). The fourth rune group, *tawido*, has the numerical value 81 = 9 × 9, which is the sacred number of the magic rune (16 + 3 + 7 + 10 + 23 + 22). If we finally add together the numerical values of all four groups of runes and add the numerical value of the four separators consisting of four circles, we get: 143 + 104 + 46 + 81 + 16 = 390 = 30 × **13,** i.e. a number exactly 10 times as large as the number of figures (39) in the ornamented belt below the runic row. As with other ornamented objects with runes (cf. especially § 51), there is thus a definite

correspondence between the runic matrix and the decorative figures. The god Ull, who was also the god of shields, appears in the first belt carrying a shield with a 13-pointed star (13 was Ull's sacred number, cf. § 29). The runic carver was able to achieve this result by inserting four appropriately spaced distinguishing marks. In the following, we will find further evidence that the distinguishing marks are assigned numerical values in runic magic in the same way as in late antique letter mysticism. In this first example of virtuoso rune magic that we have examined, it may be interesting to ask the question: could an approximately equally mathematically well-constructed result have been achieved if we had used the calculation method $f = 1$, $u = 2$, etc.? — In that case, we would have obtained 156 + 112 + 51 + 87 (i.e., the numerical value of each rune group according to the previous system, increased by the number of runes in the group: each rune except f has been assigned an apparent numerical value in the futhark that is + 1 higher than its actual value). The number 156 is indeed a multiple of 13 (12 × 13), depending on the fact that the rune group consists of exactly 13 characters. However, there is now no mutual harmony between the numerical values of the rune groups. The number 13 is not included in 112, 51, 87, or 422 (the sum of 156 + 112 + 51 + 87 + 16)! 112 = 16 × 7, but neither digit is included in the other four numbers; 51 = 3 × 17, but 3 is only included in 87 and 156; the number 17 is not included in any of the other numbers; 87 = 3 × 29, but 3 is only included in the numbers 51 and 156; moreover, 3 is too simple a number to indicate a case of virtuoso gematria. Only the interpretation I have given above in connection with my uthark theory shows a truly striking correspondence between no less than three groups of signs (the first, the second, and the

whole) and, in addition, a corresponding numerical harmony in the decoration of the horn (3 × 13 images in the largest and uppermost belt and probably an original number of 13 such belts; the undamaged, runeless Gallehushornet had this number).

48. The Vadstena bracteate, a one-sided embossed round piece of gold in the shape of a coin, has been used as a pendant (cf. fig. 12 a). Apart from a combination of words of probably purely mystical nature, it consists of the entire futhark except for the last sign ᛗ (*d*) running in a circle along the edge. This place is covered by a pearl. v. Friesen states in the appendix to his work "Runorna i Sverige" (p. 32) that on the reverse side of the bracteate "the main stems and possibly the cross stems of a *d* rune following an *o* can be observed." Before the futhark, which is divided into the three so-called families by double separators, there is a sequence of eight runes in front of a simple separator, which form a pronounceable but hardly real linguistic sound combination. The signs are repeated in a way that is reminiscent of late antique magic spells. These are repeated from the inside out, as in the mysterious Greek *ΑΒΛΑΝΑΘΑΝΑΛΒΑ* (cf. also *ΑΒΑΛΝΠΘΠΝΛΑΒΑ* on a Mithra amulet, § 14, 1) or consist of a direct repetition with or without an insertion such as the well-known ABRA-KAD-ABRA. It is therefore obvious to read *tuwatuwa* instead of *luwatuwa*, as has been read until now, in connection with late antique magical practices and runic combinations of the type *salusalu*. An examination of the reverse side of the Vadstena Bracteate also supports this reading (cf. fig. 12 b). The letter sequence *tuwatuwa* was established by Doc. Ivar Lindquist, even before I began my investigation based on late antiquity, by purely optical means (the photograph, reproduced as fig. 12 b, has been kindly made available to me by

him). Furthermore, Doc. Lindquist informed me that he was able to discern a distinguishing mark consisting of a single dot between the *d* rune and the *tuwatuwa* rune group. The inscription in its entirety should thus be as follows: the *þ* rune and the *b* rune are distinguished only by the latter's more rounded shape: ↑ᚿ ᚠ ᚫ ↑ ᚿ ᚠ ᚱ · ᚢ ᚿ ᚦ ᚠ ᚱ ᚲ ᚷ ᚠ ᛬ ᚼ ᚹ ᛁ ? ᛃ ᛒ ᛉ ᚺ ᛬ ↑ ᛒ ᛗ ᛝ ᛁ ◇ ᚷ ᚿ ·

t u w a t u w a f u þ a r k g w h n i j (z) þ R s t b e m l ŋ o d
The numerical value of the first group of sounds, tuwatuwa, is 54 = 6×9 (16 + 1 + 7 + 3 + 16 + 1 + 7 + 3); of the second group is 52 = 4×13 (24 + 1 + 2 + 3 + 4 + 5 + 6 + 7), of the third group 92 = 4×23 (8 + 9 + 10 + 11 + 13 + 12 + 14 + 15), of the fourth group 156 = 12×13 (16 + 17 + 18 + 19 + 20 + 21 + 22 + 23). We thus find within the four groups of runes the same number of runic characters (32) and the same type of numerical symbolism as on the golden horn: the number 13 (the great divine number) dominates, followed by the number 9 (the number of the magic rune) and the number 23 (the number that frightens demons). If we calculate the numerical value of the entire runic inscription, we get 54 + 52 + 92 + 156 = 354, to which should be added the numerical value of the separators, which is 6 (1 + 2 + 2 + 1). The sum of 354 and 6 is 360 = 15×24. Since the pendant was undoubtedly worn as an amulet, its main purpose must have been to bring its owner luck and wealth. It is therefore highly appropriate that the number of the wealth rune is included in the total sum of the inscriptions. As I will show below (cf. § 67, 10 ff.), there is another series of bracteates in which the number 24 is included in the total numerical value of the runic inscription. I have already mentioned in the introduction to this work (§ 1) that the number 24 played a role in Norse magic. As the sum of

the letters of the alphabet, it already enjoyed particular esteem in late antiquity (cf. § 13 f.). The number 360 (the total numerical value of the inscription) has been sacred since Babylonian times as a symbol of the circumference of the heavens. The fact that the number for the rune of wealth (f = 24) could be combined with the number for the sun rune (s = 15) must also have been perceived as a magically auspicious circumstance. f = 1, u = 2, etc., we obtain the following numerical values: 62 + 36 + 100 + 164. Three of these numbers can hardly be interpreted as particularly mystical. Only 36, being equal to 4 × 9, contains an unquestionably magical number. The total sum 368 (362 + 6) is indeed = 16 × 23, but under the given conditions, the number 23 corresponds to the rune *o*, not to the rune *d*, the symbol of daylight. The correspondence with the magical numerical relationships of the Golden Horn inscription also disappears (cf. the end of § 47).

The above interpretation of the gematria of the last three rune groups also helps to explain why the futhark is arranged in ætts: This resulted in three rune groups with the magic numbers 52, 92, 156 = 4 × **13,** 4 × **23** and 12 × **13.** The division of the Germanic alphabet into groups of eight (known as "ätter") is, like the numerical mysticism of the runes in general, undoubtedly a legacy of late antique Greek letter magic: "*computant ogdoadas et decadas*" is said in the pseudo-Tertullian writing "Libellus adversus omnes haereses". The sacredness of the group of eight probably goes back to Egyptian magic: the Egyptians originally had eight main gods. See Herodotus, Lindskogs övers., 1, p. 123 f. and p. 166; Reitzenstein, Poimandres, p. 60, and Magnus Olsen, Om Troldruner, p. 14. The fact that the groups of sounds in the Guldhorn inscription and the futhark, arranged in clans,

show gematria, based on the same magical base numbers (13 and 23), is probably due in large part to the fact that the futhark, divided into three clans, was the model that the author of the Guldhorn inscription had in mind: a runic composition that concealed the same numerical symbols as the futhark and, in addition, the magic number 9, was undoubtedly regarded as a magical inscription of the first order. The fact that on the Vadstena bracteate, as in several other futharks, the runes *þ* and *ī̆waʀ* ↓have been swapped places is undoubtedly explained by a certain magical refinement. During the classical period of runic mysticism, the number 13 and its rune were undoubtedly considered to be the symbol with the most powerful magical potency. If the rune 13 was therefore allowed to have its true place in the futhark row, there was reason to believe that its magical power would be more effective.

49. The Kylver Stone, a stone slab with an inscription from around the year 400 (it is probably slightly older than the Vadstena Bracteate, which is attributed to the fifth century), shows on its left side a futhark row ending with a magical sign which can be interpreted as a combination of 5 *t*-runes and 4 *l*-runes. Cf. the drawing on p. 7 in Norges Indskrifter, Indl. The Futhark alphabet (where the *a* and *b* runes are reversed, cf. fig. 13) shows the following sequence of characters: ᚠ ᚢ ᚦ ᚨ ᚱ ᚲ ᚷ ᚹ ᚺ ᚾ ᛁ ᛃ ᛈ ᛇ ᛉ ᛊ ᛏ ᛒ ᛖ ᛗ ᛚ □ ᛜ ᛞ *f u þ a r k g w h n i j p* (*z*) *ʀ s t e b m l* ⊠ *d o*

Compared to other futharks, this runic alphabet thus exhibits two peculiarities: the *þ* rune and the *ī̆waʀ* appear in the order they should have in the outer alphabet, whereas the *d* rune and the *o* rune are reversed. The numerical value of a complete

futhark row (24 characters with ascending numerical values in arithmetic series) is half of 24 × 25 = 300; if we add 160, the numerical value of the magic character (5 *t* = 80 + + 4 *l* = 80), we get 460, which is 20 × **23.** The fact that the *d* rune has been moved forward is probably due to a desire to strengthen the magical power of its number. Since the Kylverstenen was found standing in the darkness inside a grave, it is only natural to interpret the rune **dagaʀ* (day, light) as a sign to scare away demons. Therefore, it stands in its most magically powerful place, no. 23, and the gematria of the runic row also turns out to be based on the number of this rune (460 = 20 × 23). To the right, a little above the runic row and the tree-like sign consisting of the *l* and *t* runes, there is another inscription consisting of six runes, which I, in agreement with Noreen and others, read as: ᚺ ᚾ ᛁ ᛚ ᚾ ᚼ s u l i u s I *suilu* (the runes read backwards), I see with Ivar Lindquist an Old Norse dialectal form meaning 'sun'. The rune ᚼ also means sun in and of itself. The name of the sun would thus be hidden twice in the magical runic composition. This fits well with the light magic in the adjacent runic row (cf. above). The numerical value of *sulius* (*suilu* + *s*) is: 15 + 1 + 20 + 10 + 1 + 15 = 62, which is = 2 × 31, a typical demontal number (can only be divided evenly by 2, cf. § 45). The numerical value of all the characters engraved on the stone is 460 + 62 = 522, which is 58 × **9** and 29 × **18,** thus containing both the number of the magic rune and the number of the god of magic, Odin.

50. The Charnay brooch from Burgundy displays a significant part of the futhark row and should therefore a priori be assumed to conceal an alphabetical magical inscription. The three words contained therein, apart from the runes arranged in alphabetical order, are impossible to explain from a linguistic

point of view. Like *tuwatuwa*, they are probably mystical combinations, chosen with regard to the magical numerical values of the runes. A gematric investigation also confirms this assumption. Following Wimmer (Die Runenschrift, p. 79), I read the inscription, which in a couple of places has types that deviate somewhat from the Nordic runic characters (cf. fig. 14), as follows:

ᚢᚦᚠᚾᚦᚪᛁ⫶ᛁᛗᛗᚨᛉ⫶ᚼᛁᚨᛉᛦ *u þ f n þ a i i d d a n l i a n o* This is followed along the upper edge of the span : ᚡᚢᚦᚨᚱᚲ ᚷᚹᚺᛁ⁇ᛘ⁇⁇ᛜ⁇ᛏᛒᛗᛗ *f u þ a r k g w h n i j* (z) *þ* ʀ *s t b e m* The twentieth (last) rune is only faintly visible, but was undoubtedly once engraved on the brooch.

The numerical value of *uþfnþai* is: 1 + 2 + 24 + 9 + 2 + 3 + 10 = 51 = 3 × **17.** The numerical value of *iddan* is: 10 + 23 + 23 + 3 + 9 = 68 = 4 × **17.** The numerical value of *liano* is: 20 + 10 + 3 + 9 + 22 = 64 (8 × 8 or 4 × 16). Two of the mystical word groups thus contain the number 17 — and the three magic runes are also **17** (7 + 5 + 5). If we add to this the numerical value of the twenty Futhark characters, which is 24 + 190 (half of 19 × 20) = 214 (= 2 × 107, thus a demonic number), and the numerical value of the separator 11 (4 + 4 + 3), we get 51 + 68 + 64 + 214 + 11 = 408. This number is = 24 × **17.** It is certainly significant that the number 17 (the number of fertility) is combined with the number 24 (the number of wealth). We can thus conclude that the number **17** is included in the magical inscription in a variety of ways: 1) in the sum total, 2) in the first magic word, 3) in the second magic word, 4) in the number of all the magic word runes. In the preceding section, I have pointed out that the birch rune ᛒ and its number 17 must be regarded as Frigg's magical

symbols (cf. § 31). The number 17 and its rune were clearly used in ancient Germanic magic as protection for women in their capacity as female creatures. I recall an Anglo-Saxon spell for pregnant women (cf. § 44, 4). We would already assume from its shape that the beautiful Charnay brooch belonged to a woman. It was probably worn by the wife of some nobleman. Judging by the divided *iddan*, the magical inscription has been copied. On the lower part of the brooch, far below the densely runic upper square section, there are a few more runes. These were probably added at a later date, as they are of a completely different type than the corresponding characters in the magical runic inscription.

51. The so-called Themsen knife, actually a miniature sword, contains, as is well known, a runic inscription consisting of the entire older Anglo-Saxon futhark (28 characters) and, separated from it by two elongated ornamental patterns, the word *beagnoþ*, probably a name (cf. fig. 15). The four new runes have been inserted in the third family and have the sound values *a, æ, y, ea* (the fourth character of the futhark had the sound value *o* in the Anglo-Saxon language area). After the eight runes of the first family, there is a distinguishing mark, as after the eight characters of the second family; the third family thus consists of 12 (8 + 4) letters.**17.** This is exactly the same gematric result as the calculation of the inscription on the Charnay brooch has given us! It is particularly interesting that here, as on the golden horn in the ornamentation following the runic inscription, we can observe harmonious numerical symbolism: the nearest ornament consists of **17** squares (see fig. 15). The numerical value of *beagnoþ* is ultimately 17 + 28 + 6 + 9 + 3 + 2 = 65 = 5 × **13.** This combination of runes thus contains a magical number of

the first order. The combined numerical value of both inscriptions (408 + 65) is 473 = 43 × **11.** The eleventh rune in the carving is the twelfth rune of the futhark, *jǣra*, Icelandic *ár* = 'fertility, good harvest'. Furthermore, we should note that the miniature sword bears a total of 34 runes (28 + 6), i.e. 2 × **17** letters, and that the second group of runes begins with the birch rune ᛒ, whose numerical value is **17.** Perhaps the small sword was a gift to a woman to serve the same magical purpose as the Charnay brooch. However, it seems more likely to me that it was used by a sacrificer in certain fertility rites. See also § 70.

52. The Lindholm amulet is a piece of bone, reportedly found in Lindholm's bog in Skåne. The piece of peat in which the fish- or snake-like bone fragment (cf. fig. 16a and fig. 16b, reproduced here, were found, were made from two photographs kindly provided to me by the director of the Lund University Historical Museum, Prof. O. Rydbeck) was preserved in a piece of bark. 16b, are based on two photographs kindly provided to me by the director of the Lund University Historical Museum, Prof. O. Rydbeck), was embedded, the fragile object was split into two halves. One of the runic inscriptions has therefore become virtually illegible. Only the following can be discerned: ᚨ ᚨ ᚨ ᚨ ᚨ ᚨ ᚨ ᚨ ᛉ ᛉ ᛉ ᛥ ᛥ ᛥ ? ᛒ ᛗ ᚢ ᛏ ᛏ ᛏ ᛬ ᚨ ᛚ ᚢ ⫶ *a a a a a a a a R R R n n n ? b m u t t a l u* The first group of runes in the row is clearly structured according to the principle that a certain number of the same characters must be repeated: we see 8 *a* runes, 3 *R* runes, 3 *t* runes and 3 whole *n* runes. The sign following the last discernible *n* rune can therefore most likely be assumed to have been either an *n* rune or a *b* rune. The latter alternative has been suggested by Ivar Lindquist (cf. Lindquist, Galdrar, p. 72). L. has informed me that, after further

examination, he is skeptical of his previous position. However, with the assistance of Professor Rydbeck, I have examined the original, which is kept at the Historical Museum of Lund University, under sharp electric light. What Lindquist took to be a remnant of the knee of a ᛒ rune, we, having examined the piece of bone in the best possible light, have only been able to identify as a roughness on the surface. This leaves the second alternative: that the damaged rune was a ᚾ rune. This cannot be proven optically, but there is nothing to contradict it either. The main stem is recognizable, and the crack that appeared when the bone was broken runs diagonally exactly where the crossbar of an ᚾ rune would have been if the inscription had not been damaged.

I therefore assume that the first group of runes consisted of 8 *a*-runes, 3 *ʀ*-runes, 4 *n*-runes, 3 *t*-runes, and the rune symbol for *bmu.* If my assumption is correct, it should be supported by the result obtained by calculating the numerical value of the group of runes or the entire runic row. Of particular magical significance is undoubtedly the second group of the runic row, which consists of the three runes ᚨᛚᚢ (*alu*). This combination of runes occurs, as is well known, more or less in isolation on a whole range of amulet-like objects, mostly bracteates (cf. Bugge, Norges Indskrifter, p. 161 f.). Sometimes the same runes appear, but in a different order, e.g. ᛚᚢᚨ (*lua*) on the arrow shaft from Nydam. The gematric value of this, by all accounts magical, runic combination is **24** (3 + 20 + 1 or 20 + 1 + 3). We already know from the previous section (cf. § 1) that the number 24 was considered by the Norse to be a number of great magical significance. By carving a demon-conquering triad of runes, whose combined numerical value was 24, the lucky number of the wealth rune, one was certainly believed to have created a

more powerful than usual magical combination of letters, capable of creating an amulet. Those who wore such an amulet felt completely assured of their participation in this treasure of life. However, on the Lindholm amulet, the runic combination ᚨᛁᚾ, which is particularly emphasized by the inserted separators, has the numerical value 24, which suggests that the same lucky number symbol should also be hidden in the previous row. This now consists of 8 *a*-runes = 8 × 3 = **24,** 3 *t*-runes = 3 × 16 = 48 = 2 × **24,** 3 *ʀ*-runes = 3 × 14 = 42 = 6 × 7 (the number 7 is, like 24, a lucky number, cf. § 23), 4 *n*-runes = 4 × 9) (the number of wonders) = 36, and the runes with the sound value *bmu* and the numerical value 37 (17 + 19 + 1), the first rune has significance for women, the second for men, the third is a symbol of creation, the beginning of all things, cf. § 19). The sum of the numerical values of the entire runic row is thus 24 + 48 + 42 + 36 + 37 + 24 + 5 (the numerical value of the separator) = 216 = 9 × **24.** This is the number of wonder, combined with that of wealth. If we examine the first rune group on its own, we find that its numerical value is 187 (216—29). This number is 17 × 11, i.e. a combination of the numbers of fertility and fruitfulness. This fits well with the inner composition of the rune group (note especially the *b* and *m* runes) and also harmonizes with the numerical symbolism of the following rune group and the common numerical value of the two groups. We are clearly dealing with an amulet of wealth. In addition, there are most likely four runes hidden in the tip of the fish-like bone fragment, namely two *i*-runes and two *þ*-runes with the loops facing each other. Their numerical value is 10 + 10 + 2 + 2 + = **24.** On the other side of the bone fragment (cf. fig. 16 b) is engraved a

phrase that identifies the runemaster: ᛗ ? ᛗ ᚱ ᛁ ᛚ ᚨ ᛉ ᚼ ᚨ ᚹ ᛁ ᛚ ᚨ ᚷ ᚨ ᛏ ᛗ ? ᚨ ⫶ *e k / e r i l a ʀ / s a / w i l a g a ʀ / h a t e k a*

"I am Erilaʀ (Jarl, perhaps herulen) the skilled craftsman" (cf. Noreen, p. 382). Including the three-pointed separator, we have a sequence of 24 characters. The numerical value of the rune group is 226 (18 + 5 + 18 + 4 + 10 + 20 + 3 + 14 + 15 + 3 + 7 + 10 + 20 + 3 + 6 + 3 + 14 + 8 + 3+ 16+ 18 + 5 + 3) = 113 × 2, a typical demontal, since 113 is a prime number. I believe that the runic carver intentionally omitted *i* in *haiteka* (see § 67,9 below for more details). Experience from previous virtuoso runic inscriptions tells us that we should ultimately expect a magical combination of all the runic characters. The sum of the numerical values of one long side is 216 and the prime number of the other is 229 (226 + 3, the numerical value of the separators), to which is added the numerical value of the four maple runes at the tip = 24 (cf. above), we get the total sum 216 + 229 + 24 = 469, which is 67 × **7.** As I pointed out above, the number 7 is, alongside 24, a lucky number. The fact that 67 is a prime number clearly increases the magical power of this lucky number formula. Everything thus points to the bone fragment being a lucky charm. Perhaps this is a case of imitative magic. The bone fragment has a distinct fish shape. Perhaps it was once immersed in a stream to promote good luck in fishing? Frazer describes a similar custom among the Indians of British Columbia (The Golden Bough, p. 31): "If the fish do not come at the right time and the Indians are hungry, a Nootka sorcerer makes an image of a swimming fish and places it in the water in the direction from which the fish usually come." I mention this because of the shape of the bone fragment and where it was found (in peat after a bog). Whether such primitive customs

prevailed among the northern peoples in historical times has not been established.

53. On a bracteate from Funen (Stephens no. 24) the following inscription can be read (reproduced in Ant. tidskr. f. Sv., vol. 14, 2, p. 46): ᚺ ᛉ ᚢ ᚨ ᛇ (third rune unclear). h o u a ʀ Next to it, on a separate line: ᛚ ᚨ ᚦ ᚢ ᚨ ᚨ ᛗ ᚢ ᚨ ᚨ ᚨ ᛚ ᛁ ᛁ ᛚ ᚨ ᛚ ᛚ *l a þ u a a d u a a a l i i l a l l* The latter line clearly shows that there must be an alphabetical inscription, as only the first four runes form a real word. The five runes in the first line are thought to be a name (cf. Noreen, p. 379). The numerical value of the first line is: 8 + 22 + 1 + 3 + 14 = 48 = 2 × **24.** The numerical value of the second line is the sum of 20 + 3 + 2 + 1 = 26 (the numerical value of the word *laþu* 'love gift'), to which we add 6 *a* = 18, 4 *l* = 80, 2 *i* = 20, 1 *d* = 23 and 1 *u* = 1, thus 26 + 18 + 80 + 20 + 23 + 1 = 168 = 7 × **24.** Both groups of syllables thus contain the lucky number 24, their common number is 216 (48 + 168) = 9 × 24, thus the number associated with wealth (as in the purely letter-mystical long row of the Lindholm amulet, cf. § 52). The fact that the word *laþu* has the numerical value 26 = 2 × **13** has undoubtedly been perceived as a magically important circumstance. It also appears on other bracteates (cf. below).

54. On a bracteate from Skåne (Stephens no. 19, fig. Handbook, p. 172, with some errors, cf. Norges Indskrifter, p. 162 and p. 650) we read: ᛚ ᚨ ᚦ ᚢ ᛚ ᚨ ᚢ ? ᚤ · ? ? ᚤ ᛚ ᛚ ᚢ *l a þ u l a u ka* ʀ *ga ka* ʀ l *l u* Six runes form two pairs of bind runes. The numerical value of the first group of the inscription is: 20 + 3 + 2 + 1 (*laþu*, cf. § 53) = 26 + + 46 (20 + 3 + 1 + 5 + 3 + 14) = 72 = 3 × **24.** The numerical value of the second group is: 6 + 3 + 5 + 3 + 14 + 20 + 20 + 1 = 72 = 3 × **24.** Both groups of runes thus

contain the same numerical value, three times the lucky number 24. The third rune from the end is an *l* rune. Previously, people have wanted to see a mistake and read *alu*. However, the ingenious nature of the design shows that such an assumption is unnecessary. Including the separator, the numerical value of the whole is 145 = 29 × **5.** The amulet therefore probably also served as protection against the evil eye (cf. § 21, note that 29 is a prime number). Through the use of bind runes, the number of runes is 15 = 3 × **5.**

55. On a bracteate from Darum, Denmark (Darum II), the following is read: ᚠᚱᛟᚺᛁᛁᛚᚨᛚᚨᚦᚢ

f r o h i l a l a þ u The first word is probably a name, the latter is the *laþu* 'love gift' known from the bracteate inscriptions discussed above. According to the illustration in Stephens, Runic Monuments 4, p. 76, there is no distinguishing mark between the two groups of runes (as Noreen, p. 376, indicates). The numerical value of the first group of runes is 24 + 4 + 22 + 8 + 10 + 20 + 3 = 91 = 7 × **13.** The numerical value of the second group is 20 + 3 + 2 + 1 = 26 = 2 × **13.** Both groups thus contain gematria, based on the highly magical divine number 13. The combined numerical value is 117 = 9 × 13. The number of the miracle is thus included in the whole.

56. On a plane from Vi in Denmark, the following can be read on one side: ᛏᚨᛚᛁᛄᛟ and on a separate line: t a l i j o ᚷ ᛁ ᚼ ᛊ ᛁ ᛟ ᛄ : ᚦ ᛁ ᛚ ᛁ ᛦ ᛊ ᛁ ᛚ ᚨ ᛟ ᚱ ᛒ ᚨ g i s a i o j w i l i ʀ a i l a o r b a The inscription is reproduced in Stephens, Handbook, p. 83, but rather imperfectly. Corrections have been made by Wimmer, Aarbøger 1867, p. 29, and 1868, p. 69 f. Several of the runes that follow the dividing mark, which consists of four dots (cf.

Wimmer, Die Runenschrift, p. 163 f.), are difficult to read. I have followed Noreen, p. 392 (cf. however v. Friesen, Röstenen, p. 138 f.). The inscription does not belong to the more reliable material. However, I am treating it in this section, as according to my calculations it appears to contain complex gematria. This suggests that Noreen's reading is indeed correct. The presence of a dividing mark containing no less than four dots indicates that the inscription was made with a view to achieving a certain total sum. Unfortunately, an inscription on the other side of the object is largely illegible (three runes are completely obliterated and the others are barely discernible). This inscription also has a complicated punctuation mark (3 or 2 dots, cf. Wimmer, Die Runenschrift, p. 164). The numerical value of the word *talijo* in the first line of the inscription, which Noreen interprets as meaning 'plane,' is: $16 + 3 + 20 + 10 + 11 + 22 = 82 = 41 \times 2$ (a typical demontal). I interpret the first rune group in the next line, *gisai oj*, as "To Gis's inheritance and estate." ᛜ and ᛌ would thus be loan runes. Noreen interprets the *o* rune as *orba* and sees in the *j* rune an abbreviation for *jehu* 'I give, I assign'. It seems much more natural to me to understand the last two runes as not denoting sounds, but rather the entire word that was their name at the time in question, i.e. *ōðal(a)* 'inheritance' and *jār(a)* 'wife'. The numerical value of the first rune group in the second row is: $6 + 10 + 15 + 3 + 10 + 22 + 11 = 77 = 7 \times$ **11,** thus exactly the number of the rune **jāra*. The gematric value thus corresponds perfectly to the meaning I have assigned to the runic symbols. If we then read the second rune group in connection with the previous researcher: *wiliʀ aila orba,* we have to assign the numerical value: $7 + 10 + 20 + 10 + 14 + 3 + 10 + 20 + 3 + 22 + 4 + 17 + 3 = 143 = 13 \times$ **11.** Thus, we again encounter **jāra*, the

symbol for good fortune. This number is associated here with the highly magical number **13** — and the number of runes is **13**. There are 26 runes on this side of the object, i.e. 2 × **13**. It seems clear that this is a case of virtuoso rune magic. If we add up the numerical value of the entire page, we get 82 + 77 + 4 (the numerical value of the separator) + 143 = 306 = 18 × **17**. This is the number of fertility, associated with Odin's number. It is particularly unfortunate that the runes on the other side of the object are so damaged. I am unable to restore this part of the inscription, as there are too many unknown factors.

57. On the dip cup from Thorsbjærg, the following can be read on one side of the object (fig. 17): ᛟ ᚠ ᛁ ᛚ ᚢ ᚦ ? ᚠ ᚨ ᛉ

o w l þ u þ e w a ʀ and on the opposite side, using a bind rune: ᛏ ᛁ ᚠ ᚨ ᚹ ? ᚨ ᚱ ᛁ ᛉ n i w a j em a r i ʀ **12** (also 4 × 24). The inscription on the other side has the numerical value: 9 + 10 + 7 + 3 + 11 + 18 + 19 + 3 + 4 + 10 + 14 = 108 = 9 × **12**. Both inscriptions thus show the same kind of gematria. As I have previously pointed out, the number 12 and its rune must have been symbolic of the earth (cf. § 28). The purpose of the magical inscription must clearly have been to invoke a certain power attributed to the earth by magic. In this case, it is most likely to have been its power to stop the flow of blood. Furthermore, there are 20 runes, which is the sacred number of water (the liquid element). The inscription was clearly located on the pommel of a sword scabbard. If the bearer of this weapon was wounded, it was believed that the flow of blood could be stopped by placing the magical pommel on the wound.

58. On a buckle from Vi in Denmark, which was clearly attached to a belt (abbr. 18), there is an inscription consisting of

two rows of sharply engraved, beautifully shaped runic characters. The runes in the lower row are turned upside down, a circumstance that indicates a magical purpose for the engraving. The upper row consists of the runes: ᚱ ᚨ ᚨ ᛋ ᚨ ᚢ ᚹ ᛁ ᛇ ᚨ *l a a s a u w i j a* The meaning of such an inscription can be sought in the purely gematric. The numerical value is: 20 + 3 + 3 + 15 + 3 + 1 + 7 + 10 + 11 + 3 = 76 = 4 × **19.** The lower row has the following runes. Friesen, Röstenen, p. 139, reads *kana-* instead of *aa-*. What he has taken for two runic characters may be three secondary scratches (cf. fig. 18). (turned downwards): ᚨ ᚨ ᛗ ᚨ ᚷ ᚨ ᛋ ᚢ *a a d a g a s u* The numerical value of this row, which is also linguistically incomprehensible, is: 3 + 3 + 23 + 3 + 6 + 3 + 15 + 1 = 57 = 3 × **19.** In both cases, therefore, the gematria is the same. The number of runes is 18 (10 + 8), which is Odin's number. Since the brooch was most likely worn by a woman, this is probably a case of erotic runic magic: the number 19 is the number of the man rune. From "En isländsk svartkonstbok från 1500-talet" (published by Nat. Lindqvist, p. 57), we know that *maðr* runes were used in a spell to "bewitch a woman and win her love." In older runic magic, the man rune number 19 was thus probably included in runic spells composed for this purpose. The numerical value of the entire inscription is 133 = 7 × 19. The man's number has thus been linked to the lucky number 7. For more on runic magic, see § 67, 15 ff. Eighteen of the runes are turned downward, consistent with the aforementioned erotic runic formula from the 1500s.

59. On a bracteate from Næsbjærg (Stephens no. 80 abbr. in Handbook, p. 195) there are three groups of runes standing in different rows: ᚾ ᛁ ᚢ ᚹ ᛁ ᛚ ᚨ ᛚ ᚦ ᛚ ᛏ ᚴ *n i u w i l a l þ l t k*

The first group of runes probably forms a name (cf. Noreen, p. 384). The latter two groups of signs can hardly be anything other than runic combinations of a magical nature. The numerical value of one is: 20 + 2 + 20 = 42 = 6 × **7,** of the other: 16 + 5 = 21 = 3 × **7.** In both cases, gematria is present, based on the lucky number 7 (cf. below § 67, 15 ff.). The numerical value of the entire bracteate inscription is: 42 + 21 + 60 (9 + 10 + 1 + 7 + 10 + 20 + 3) = 123 = 3 × 41. The latter (a prime number) is a magical number that is quite common on bracteates (cf. § 67, 26 ff.). Perhaps the purpose of the amulet was to protect against enemy weapons (cf. § 40, 3).

60. On a bracteate from Zealand (Stephens no. 19, reproduced in Handbook, p. 186) we read: ᚺᚨᚱᛁᚢᚺᚨᚺᚨᛁᛏ ᛁᚲᚨ᛬ᚠᚨᚱᚨᚢᛁᛋᚨ᛬ᚷᛁᛒᚢᚾ?ᚨ⦙ᛏᛏᛏ

h a r i u h a | h a i t i k a f a r a u i s a g i b u| a u j a t t t

The third and seventeenth runes are somewhat unclear. In agreement with previous researchers, I read ᚱ (*r*) in both cases, cf. Noreen, p. 386. The separators consist of 3, 2, and 4 dots, respectively. Finally, there is a *t* rune with triple side strokes. If we calculate the numerical values of the different groups of runes, we get the following numerical values for the first: 8 + 3 + 4 + 10 + 1 + 8 + 3 + 8 + 3 + 10 + 16 + 10 + 5 + 3 = 92; for the second: 24 + 3 + 4 + 3 + 1 + 10 + 15 + 3 = 63; for the third: 6 + 10 + 17 + 1 + 3 + 1 + 11 + 3 = 52; for the fourth (the binding rune): 16 + 16 + 16 = 48. Two of the groups of runes are thus identical in numerical value to their respective families in the futhark: the first group = the second family = 92 = 4 × 23, and the third group = the first family = 52 = 4 × 13. The numerical value of the second group (63) is = 7 × 9 (the lucky number and

the magic number), the numerical value of the fourth group (48) is = 2 × **24.** As in the Golden Horn inscription, we find number mysticism based on the numbers 13, 23, and 9. Although no number appears in two or more groups of rings, we can hardly doubt that this is a case of virtuoso gematria. If we calculate the numerical value of the entire inscription, taking into account the punctuation marks, whose varying number of dots indicates a numerical symbolic purpose for the entire inscription, we get the sum 264 (92 + 63 + 52 + 48 + 9) = 11 × **24,** which is the number of wealth combined with fertility. There is no doubt that a person with an eminent knowledge of runes was the author of this inscription. The meaning of the text indicates this: "My name is Hariuha, the dangerously knowledgeable. I bring happiness" (cf. Noreen, p. 386).

61. On the Björketorp stone, whose inscription, like the three runestones discussed below, The reproductions shown here are taken from larger-format photographic images, published in v. Friesen's work "Lister- och Listerbystenarna i Blekinge" (Uppsala University Yearbook 1916) and in Ivar Lindquist's thesis "Galdrar" (reproduction of the Stentoften stone, fig. 22). belonging to the last period of the older runes (650-700?), the following is read on the north side: ᚢ ᚠ ᛉ ᚱ ᛉ ᛒ ᛉ ᚻ ᛒ ᛉ *u þ A r A b A s b A* The rune sign, which here as in the following is transcribed with *A,* has arisen from one of the variant forms of the *j* rune. When the rune name **jāra* changed to **ār(a),* the rune symbol with which it was associated became unsuitable as a symbol for the *j* sound. However, due to its new vocalic sound, it could function as a vowel symbol. It has been assumed that a difference in the quality of the *a* vowel was decisive for the use of the rune ᚨ or the rune ᛉ, and this is undoubtedly the case in

somewhat later times. However, I am inclined to believe that on the four Blekinge stones, the two runic characters were used alternatively without regard to phonetic differences, merely to achieve various letter-mystical purposes more easily. A comparison between the spelling on the Gummarp stone and the Istaby and Stentoften stones seems to me to confirm this (cf. § 68 ff.). The numerical value of the northern inscription on the Björketorp stone (abbrev. 19 a) is, if we assign the new vowel sign the numerical value 11 of the original sign, as follows: 1 + 2 + 11 + 4 + 11 + 17 + 11 + 15 + 17 + 11 = 100 = **10** × **10.** Since the number of runes is also **10,** this number is hidden in three different ways in the runic row. The meaning of this is (cf. Noreen, p. 375): "fateful prediction." This is obviously a case of letter magic, based on the number 10 in the ice rune. As I have previously pointed out, this should have been the numerical symbol for death; the number in the ice rune made those who were exposed to its power cold (cf. Ja 26 and § U, 3).

ᚢ ᚼ ᛁ ᛘ ᛤ ᚱ ᚾ �∗ ᛯ ᚱ ᛩ �∗ ᚾ *h A i d R r u n o* | *r o n u* ᚡ �∗ ᛏ � ᚾ �∗ ᚲ ᚾ �∗ ᛘ ᛘ ᚱ � ᚷ ᛁ *f A l A h A k* | *h A d e r A* | *g* ᛁ �∗ � ᚱ ᚾ �∗ � ᚥ � ᚱ � ᚷ ᛘ ᚾ *i n A r u n A R* | *A r A g e n* ᚾ �∗ ᛘ ᚱ �∗ ᛘ �∗ ᛏ �∗ ᚾ ᚼ ᚥ *h A e r A* | *m A l A u s R* ᚾ ᛏ ᛁ �∗ ᚥ ᚠ ᛘ ᛏ �∗ ᛘ �∗ ᚾ ᛘ ᛘ *u t i A R* | *w e l A d A u d* *e* ᚼ �∗ ᚥ ᚦ �∗ ᛏ ᛒ �∗ ᚱ ᚾ ᛏ ᚥ *s A R* | *þ A t* | *b A r u t R* The lines, which run across the stone, starting at the bottom, have been given here in reverse order. The eleventh character in the second line is difficult to read, but should, in all likelihood, be interpreted as an *e* rune. In some details, the translation of this long inscription is uncertain. However, the main content can be suggested with the words (cf. Noreen, p. 375): "I hid the row of honor runes here, the great runes of sorcery ... mute ... death to the one who destroys this (i.e., the memorial)." This inscription promises

death as punishment to anyone who dares to damage the runestone. Here, then, is revealed what lies hidden in the numerical mysticism of the northern inscription. The numerical value of the six rows of runes in the southern inscription is: 1) 8 + 11 + 10 + 23 + 14 (*hAidR*) + 4 + 1 + 9 + 22 (*runo*) + 4 + 22 + 9 + 1 (*ronu*) = 66 + 36 + 36 = 138; 2) 24 + 11 + 20 + 11 +8 + 11 + 5 (*fAlAhAk*) + 8 + 11 + 23 + 18 + 4 + 11 + 6 (*hAderA + g*) = 90 + 81 = 171; 3) 10 + 9 + 11 + 4 + 1 + 9 + 11 + 14 (*inArunAR*) + 11 + 4 + 11 + 6 + 18 + 1 (*ArAgeu*) = 69 + 51 = 120; 4) 8 + 11 + 18 + 4 + 11 (*hAerA*) + 19 + 11 + 20 + 11 + 1 + 15 + 14 (*mAlAusR*) 52 + 91 = 143; 5) 1 + 16 + 10 + 11 + 14 (*utiAR*) + 7 + 18 + 20 + 11 + 23 + 11 + 1 + 23 + 18 (*welAdAude*) = 52 + 132 = 184; 6) 15 + 11 + 14 (*sAR*) + 2 + 11 + 16 (*þAt*) + 17 + 11 + 4 + 1 + 16 + 14 (*bArutR*) = 40 + 29 + 63 = 132. The total numerical value of this page is thus: 138 + 171 + 120 + 143 + 184 + 132 = 888 = 37 × **24** (the number of the rune of wealth, combined with a prime number). The total numerical value of the magical rune stone is therefore: 100 + 888 = 988 = 76 × **13** (the great magical power number, which we have found in so many of the virtuoso runic inscriptions from earlier times). The fact that 76 = 4 × 19 (the number of Thor, which is also found on the Gummarp stone and appears in many ways in the Stentoften inscription, combined with the number of humans) must also have had mystical significance. To fully understand the magical purpose of this runestone, we should bear in mind that it was a boundary marker. "The stone was erected at the very boundary between the villages of Björketorp, Leråkra, and Listerby," according to v. Friesen, op. cit., p. 5. It is an ancient magical custom to place land under divine protection by laying spells on boundary markers. Cf. Westermarck, Ur sedernas historia, p. 148. The stone thus served a dual purpose: it

threatened death (number symbol 10) to anyone who violated the property mark, and it was intended to secure the protection of the highest divine power (number symbol 13) for the landowners and the gift of wealth (number symbol 24) for the local community. The fact that the curse inscription faces north and the good luck inscription faces south is most likely due to the rules of magic.

62. According to a drawing made before the stone disappeared, the following runic inscription was carved on four different sides of the Gummarp stone (formerly called "the stone from Gommor") (one line on each side, cf. fig. 20): ᚾ ᛉ ᚠ ᚻ ᚠ ᛩ ᛁ ᛉ ᚡ ᛉ *h a þ u w o l A f A*   *s A t e* ᚻ ᛏ ᛉ ᛒ ᛉ ᚠ ᚱ ᛁ ᛦ *s t A b A | þ r i a* ᚡ ᚡ ᚡ *f f f* However, some of the runic characters are more or less unclear in the drawing. With Ivar Lindquist, Galdrar, p. 68, I supplement the first row of runes with the rune ᛦ (R) and interpret the inscription according to him and v. Friesen as: "Hathuwolf set (carved) three sticks *f f f*". Everything points to this being a case of fertility magic. The numerical values of the four groups of runes are: 1) 8 + 11 + 2 + 1 + 7 + 22 + 20 + 11 + 24 + 11 + [14] (*hAþuwolAfA*[*R*], last rune supplemented) = 131; 2) 15 + 11 + 16 + 18 (*sAte*) = 60; 3) 15 + 16 + 11 + 17 + 11 (*stAbA*) + 2 + 4 + 10 + 3 (*þria*) = 70 + 19 = 89; 4) 24 + 24 + 24 (*fff*) = 72. The numerical value of the entire inscription is thus 131 + 60 + 89 + 72 = 352 = 32 × **11.** The number of the fertility rune (11) is thus included in the total sum of the runic characters (since 32 = 8 × **4,** Thor's number is also included). This harmonizes with the purely letter-magical fourth line, a formula whose inscription is emphasized as the work of a person with clear magical knowledge. This formula consists of the wealth rune repeated three times. Cf. Lindquist, Galdrar, p. 69 and p. 104. Wealth

(number symbol 24) was clearly expected to be obtained through the fertility of the earth (number symbol 11).

63. The Istaby stone bears an inscription consisting of 53 runes. On one side, the following two lines of runes are carved from top to bottom, the first on the right and the second on the left (of the rune *ār*, a variant ᚼ strongly deviating from the sign ᚼ on the Björketorp stone was used, cf. fig. 21 a and b): ᚼ ᚡ ᚱ ↑ ᚤ ᚾ ᚼ ᚱ ᛁ ᚦ ᚢ ᛁ ᚱ ᚡ ᚱ *A f a t ʀ* | *h A r i w u l a f a* ᚾ ᚼ ᚦ ᚢ ᚦ ᚢ ᛁ ᚱ ᚤ ᚾ ᚼ ᛘ ᚱ ᚢ ᚦ ᚢ ᛁ ᚱ ᚤ ᚾ ᚼ ᛘ ᚱ ᚢ ᚦ ᚢ ᛁ ᚱ ᛁ ᚤ *h A þ u w u l a f ʀ* | *h A e r u w u l a f i ʀ*

On the other side (cf. abbreviation 21 b) is the line: ᚠ ᚱ ᚱ ᚼ ᛁ ↑ ᚱ ᚢ ᚼ ᚼ ᚤ ᚦ ᚼ ᛁ ᚼ ᚤ *w a r A i l* | *r u n A ʀ* | *þ A i A ʀ*

According to v. Friesen (op. cit., p. 34), the inscription should be interpreted as: "After Härjulf (this stone was erected). Half Hjorulfsson carved these runes." The numerical value of the first row of runes on the front is: 11 + 24 +3 + 16 + 14 (*AfatʀNoreen*, Aisl. Gr.⁴, p. 380, incorrectly has *Afatr* instead of f. *Afatʀ*.) + 8 + 11 + 4 + 10 + 7 + 1 + 20 + 3 + 24 + 3 (*hAriwulafa*) = 68 + 91 = 159 = 3 × **53**; the numerical value of the second row of runes on the same side is: 8 + 11 + 2 + 1 + 7 + 1 + 20 + 3 + 24 + 14 (*hApuwulafʀ*) + 8 + 11 + 18 + 4 + 1 + 7 + 1 + 20 + 3 + 24 + 10 + 14 (*hAeruwulafiʀ*) = 91 + 121 = 212 = 4 × **53**; the numerical value of the runic row on the back is: 7 + 3 + 4 + 11 + 10 + 16 (*warAit*) + 4 + 1 + 9 + 11 + 14 (*runAʀ*) + 2 + 11 + 10 + 11 + 14 (*þAiAʀ*) = 51 + 39 + 48 = 138 = 6 × **23.** The back of the stone thus conceals in its inscription a demon-scaring number, the same one that dominates the gematric arrangement of the Kylver inscription (cf. § 49). On the front, both groups of runes show the same type of gematria: in both cases, it is a prime number and, moreover,

the same number 53, which is included in the sum of each row of runes. As I have already had occasion to point out on several occasions, 53, as a prime number, is an anti-demonic number (cf. § 19 and § 45, 5). The total number of runes on the stone is also **53** (15 + 22 + 16). The gematric value of the entire inscription on the runestone is: 159 + 212 + 138 = 509. This number is also a prime number, and therefore anti-demonic. The magical inscription on the stone was clearly placed there to keep sorcery and demonic beings away from the site. The stone was erected as a protection over the resting place of the deceased Härjulfs. Cf. Magnus Olsen, Norges Indskrifter, p. 623 f., where the apotropaic function of the older runic inscriptions placed at graves is emphasized.

64. The inscription on the Stentoften stone presents a very difficult problem. Despite the interpretations of several highly respected scholars, the actual meaning of the inscription remains unclear, and it is possible that this runic inscription can never be deciphered with any degree of certainty, as many of the runes are not entirely clear. However, after a visit in the summer of 1925 to Sölvesborg, where the stone is now kept in the church, I believe that five lines of runes, which clearly form the actual content of the inscription, can be deciphered with almost complete certainty. These five groups of runes, which I determined without any preconceived ideas, differ only in one detail in the fifth line from the interpretation of the researcher who most recently studied this runestone in detail, Ivar Lindquist, Galdrar, p. 92. During my examination of the stone, a gematric calculation of the numerical values contained therein, undertaken long after the fact, showed that they are in numerical harmony with each other.

In the middle of the stone (cf. fig. 22) there are four rows of runes, running from bottom to top. After the last rune in the second row there is a notch in the stone. This may have been made during the carving, in which case it should be regarded as a distinguishing mark. However, the runestones in the Blekinge group have no other distinguishing features. ᛏᛁᚾᚢᚽᛒᛟᚱᚢᛗ ᛦᛁᚾᚢᚽᚨᛒᛟᚱᚢᛗᛦ ᛏᛁᚾᚢᚱᚷᛖᛋᛏᚢᛗ ᛦ *niuhAborumR* ᛏᛁᚾᚢᚱᚷᛖᛋᛏᚢᛗ ᛏ *niuhagestum* ᛦᚾᚷᚦᚢᚠᛟᛚᚷᚠᚥᚷᚷᚠ *hApuwolAfR | gAf |* ᚨᚾᚷᛦᛁ ᚠᚷᛚᚷᚠᛏᛗᚷ *hAriwolAfR | e | A*

The second and third letters from the end are quite unclear. However, they can hardly be anything other than an *e* and an *R* rune. If one reads the second character from the end as the rune ᛗ (*m*), as Friesen does, there is far less support for this in the actual runic inscription than if one sees the character ᛖ (*e*) in it, as Lindquist does. I have not been able to discover any trace of the lines that separate an *m* rune from an *e* rune. The indistinctness of the *R* rune consists in the fact that only the left side of the letter can be distinguished, and that a corresponding line on the other side does not appear to have been carved. It is conceivable that at the time in question, when cutting quickly into wood, it was customary to simplify the runic sign in this way, which caused the runic carver to use a type not otherwise used in stone inscriptions.

The numerical value of the first row of runes is: 9 + 10 + 1 + 8 + 11 + 17 + + 22 + 4 + 1 + 19 + 14 (*niuhAborumR*) = 116; of the second row: 9 + 10 + 1 + 8 + 3 + 6 + 18 + 15 + 16 + 1 + 19 + 14 (*niuhagestumR*) = 120; of the third line: 8 + 11 + 2 + 1 + 7 + 22 + 20 + 11 + 24 + 14 + 6 + 11 + 24 + 11 (*hApuwolAfR gAf A*)= 172; from the fourth row: 8 + 11 + 4 + 10 + 7 + 22 + 20 + 11 + 24 + 14

+ 18 + 11 (*ᚺᛆᚱᛁᚹᚩᛚᛆᚠᛦ e ᚨ*) = 160. Each of the four groups of sounds turns out to have Thor's number, 4, hidden in the sum of their numerical values: 1) 116 = 29 × **4**; 2) 120 = 30 × **4**; 3) 172 = 43 × **4**; 4) 160 = 40 × **4**. The number 4 is certainly one of the lower numbers and is therefore included in a significant proportion of all numbers (25%); however, the fact that four consecutive groups of runes in an unquestionably magical inscription show gematria based on this number must be interpreted as intentional. ᚢ ᛌ ᚾ ᚢ ᚼ ᛁ ᛖ *u s n u h l e* Lindquist has attempted to interpret the second rune from the end, which was not noticed by v. Friesen, as a bind rune of a variant of the *ār* rune and a *t* rune (cf. Galdrar, p. 94 f.). Upon close examination of the stone, it has been completely impossible for me and two other people in my company to discover more than one (and this one to the right of the main staff) side staff to the second rune from the end. Since this row on the stone is upside down, my observation essentially agrees with Lindquist's, cf. Galdrar, p. 94: "The one on the right (the smallest) is unclear, the one on the left is completely clear." I would like to eliminate the smaller scratch on abbreviation 22. Otherwise, this sign is by no means unclear. One can follow the groove of the main stem with one's finger and its deviation into a side branch forming the same angle. The sign is only slightly less deeply carved than the adjacent runes and has therefore been interpreted by v. Friesen as an unfinished attempt. However, the large distance between ᚾ and ᛗ (cf. fig. 12 in a. a.) already gives rise to the suspicion that there was another sign in the rune group. The indentation in the stone that I have examined can easily be explained as an *l* rune carved there. The numerical value of this fifth runic row, read as *usnuhle,* is: 1 + 15 + 9 + 1 + 8 + 20 + 18 = 72 = 3 × **24.** This runic

combination appears to be a magical letter formula, which in that case would only be numerically symbolic in relation to the four rows discussed above. Like these, it also appears to have the number 4 hidden in its numerical value sum, as 72 is also = 18 × **4**. (It may be noted that even Lindquist's suggestion, with a slight modification, *nuhte* instead of *nuhᴀ̂te*, can be brought into harmony with the magic of the number four. The sum of the numerical values in this reading is 68 = 17 × 4.) Each line in the main part of the inscription thus consists of a group of runes containing the number 4, Thor's number, in its gematric sum. We also find a mathematical regularity in the number of runes. The four rows of rune groups consist of 49 = 7 × 7 characters, and the magical formula *usnuhle* that follows also consists of 7 characters. The whole thus consists of 56 = **4** × 2 × 7 characters. The numerical value of the entire central inscription is 640 (568 + 72) = **4** × **4** × **4** × 10 (cf. p. 62).

Around the five lines of the central inscription runs a runic circle, in which several characters are not clearly discernible, but whose general meaning is fully comprehensible. This part of the inscription proclaims that "power runes" have been carved and that anyone who dares to destroy the stone will be threatened with death by magic (cf. the inscription on the Björketorp stone, § 61). As far as I can see, calculating the numerical value of this part of the inscription is currently an impossible task. Since about eight runic characters are more or less difficult to decipher, there are too many uncertain factors.

As for the meaning of the central inscription mentioned above, it seems to me almost certain that we are dealing here with a galder-like poem. Bugge has already presented this part of

the inscription in verse form in Norges Indskrifter, p. 23, and Ivar Lindquist has, in his commendable study Galdrar, p. 96 ff., pointed out technical similarities with the old form of galder-type poems. However, I cannot fully agree with his interpretation. In the fifth line, *usnuhle*, I believe, as mentioned above, that we should rather see a magical formula. Comparable is the runic sequence *AAllAtti* on the weaving brick from St. Michael's (cf. § 65, 2), which should be separated from the rest, with which it is only connected in a talismanic sense. I read the third and fourth rows of runes as follows:

*hAþuwolAfR gAf A(r) hAriwolAfR e A(r)*It is likely that the neutral ending -*a* had already fallen out somewhat before the late Old Norse period, cf. my work Zur Geschichte des indogermanischen Neutrums, p. 49 ff. (Kungl. Humanistiska Vetenskapssamfundet i Lund, Annual Report 1925—1926).

I assume that we should not only interpret the final rune in the third row with v. Friesen and Lindquist, but also the *A* rune at the end of the fourth row as a loan rune, intended to be read with the entire name and not just with its initial sound. In the preceding *e*, I see the symbol for a late Norse *ǽ* 'always, always' (cf. the spelling *gestumR* with *e* for *æ*, analogously

introduced after other paradigm forms with sound-law-based umlaut in the stem). The spelling *a* for *ǽ* 'always' has been suggested on a bracteate from Overhornbæk (no. 30, cf. Jóhannesson, Grammatik der urnordischen Runeninschriften, § 36, note 2). With regard to the two opening lines, I find it appealing to follow Axel Kock, cf. Arkiv f. nord. filol. 27, ny följd 23, p. 2 ff., and read *niu* '9' and see a compound word in the rest of the line in both cases. This gives us an artfully alliterative

stanza: *niu* ƕ*AborumR niu* ƕ*agestumR* ƕ*ApuwolAfR gAf* ▲*(r)* ƕ*AriwolAfR e* ▲*(r)*. I am certainly not in a position to give a fully convincing interpretation of the two words ƕ*AborumR* and ƕ*agestumR*. If the preceding *niu* is to be interpreted as meaning 'nine', then it is clear that the other compound nouns (perhaps formed as kenningar for the occasion in question) are parallel to each other in the galder. We can determine the latter compound elements of these words with greater or lesser probability: *–borumR* can be appropriately interpreted with v. FriesenJfr a. a., p. 46; in connection with Herzberg, Glossar til Norges gamle Love, v. Friesen has imagined *gestr* in the meaning of 'hirdman' ('member of the royal constabulary'). interpreted as 'to sons' and *–gestumR* as 'to guests'. However, the first compound element ƕ*A*(ƕ*a*)- can be understood in several ways, which makes a reconstruction of the original meaning extremely difficult. Late Norse *hā-* can phonetically be traced back to an older **hanha-* (for the chronology of such contractions, see below). In this case, it seems most likely to me that it is a place name (with the original meaning 'tree' or 'forest'). However, as a preliminary conjecture, I would like to suggest that *hā-* in this case could have arisen from an older Proto-Norse **hawa-* with the meaning 'high' (cf. *Hå-* in *Hå-tuna*, etc.). From a not distant Old Norse period, we have evidence of the fully analogous contraction **nawi-* nā- in n▲seu (< **nawi-saiwi*) on the Eggjumstenen (cf. also the contraction -spā, in the runic inscription -sb▲, from the older **spahō* on the Björketorpstenen). Since this is undoubtedly a magical poem, it seems to me that consideration should be given to whether *hā-* refers to the god Odin (note: 9 + 9 = 18, Odin's number). One of his names in Old Norse mythology is *Hár* (< **hawaR*) 'the tall one' (cf. Gylfaginning 27). In that case,

the four-line runic verse could be interpreted as follows: "To nine sons of Hár, to nine guests of Hár, Hathuwolf gave ering, Hariwolf always ering." In this context, "sons of Hár (Odin)" would refer to "men of princely birth" and "guests of Hár" would mean that these nine men "went to Odin," i.e., died and now resided in Valhalla. One could imagine that the survivors, invoking the magical help that two deceased kings of sacred prominence had left their ancestors, sought to obtain good fortune by erecting a runestone commemorating this past era of prosperity. This is closely related to Lindquist, who, in a. a., p. 171, assumes that the runestone was erected to invoke good luck with the annual harvest in a time of crop failure. That the stone, as Lindquist assumed, was erected by Hathuwolf to commemorate his own and a deceased co-king's good fortune, may also be the case. In my interpretation, Hariwolf, who died before Hathuwolf, had the greater prosperity (cf. *e* *Ar*). However, I emphasize once again that I consider this interpretation to be only a preliminary conjecture. I do not rule out the possibility that a better interpretation may be found, or that an opinion already expressed may be correct in more respects than my own. Ivar Lindquist's interpretation of the first two lines as "To the settlers, to the newcomers" undoubtedly gives a less obscure meaning than the interpretation I have given. If we are dealing with a magical poem, however, a certain obscurity and brevity may be a criterion of authenticity rather than the opposite. However, Lindquist's view of the origin of the Stentoften inscription is based on a migration hypothesis that only a philologically trained historian specializing in the period in question is in a position to assess clearly. I find Lindquist's view of the inscription as a galder poem to be beyond any doubt. If we

are dealing with a galder, it is, however, of great interest to investigate what numerical symbolism may be hidden in its sum of words (cf. chapter 3). If we include the magic formula, we get a sequence of eleven words, if we follow my proposed interpretation: 1) *niu*, 2) *hAborumʀ*, 3) *niu*, 4) *hagestumʀ*, 5) *hAþuwolAfʀ*, 6) *gAf*, 7) *A*(*r*), 8) *hAriwolAfʀ*, 9) *e*, 10) *A*(*r*), 11) *usnuhle*. Thus, there are as many words as the number for the rune *ār* ('year, good year'), which is 11 (cf. § 27). That the kings of the pagan North were believed to have the power to bring good harvests to the kingdom has been thoroughly demonstrated by v. Friesen, Lindquist, and others (cf. ibid.). Everything indicates that the purpose of the Stentoften stone was to bring fertility to the region through galder magic and runic magic. The fact that Thor's words (as is the case on the Gummarp stone, cf. § 62) are hidden in the gematric scheme of the central inscription is consistent with such a purpose. As lord of thunder and rain, Thor was a powerful god of fertility and was worshipped as such in the North. "Thor rules the air and commands thunder and lightning, wind and rain, clear weather and crops," says Adam of Bremen in The History of the Hamburg Bishops IV 26, 27. As the god of wind, Odin also had a certain relationship to the year's harvest. According to Heimskringla, the Norse prayed to Odin at the midwinter sacrifice for a good harvest in the coming year, and Olof Trätälja was given to Odin "to ensure a good year." Cf. Oden-Wodan as a fertility god in Mogk, Germanische Mythologie, p. 109. He was also the chief god of the nobility and those skilled in runes. The eleventh word in the fertility spell, the magic word *usnuhle*, has, as I have already mentioned, the numerical value 72, which is a combination of the numbers of Thor and Odin (4×18). If we

could calculate the numerical value of all the runes on the Stentoften stone, we would probably find gematria based on an Odin number (18 or 9). However, with the material currently available, it is hardly possible to attempt this task with any degree of relative certainty.

65. We have now examined the most important magical inscriptions from the period of the older runes. The 18 runic inscriptions discussed above have proven to be of such a complex mystical nature that their deliberate arrangement according to a certain mathematical scheme is obvious to anyone who interprets them with regard to the numerical value series of the older runic alphabet. However, there are several runic inscriptions from the time of the younger futhark that are unmistakably magical in character. To describe and interpret these exhaustively is, of course, beyond the scope of this work. Nevertheless, at the present stage of our investigation, a glance at some of these runic monuments may be of instructive interest. Faced with this group of magical inscriptions, we must ask ourselves the question: Has a new magic, based on the new runic alphabet of 16 characters, perhaps emerged—or has the old counting system, in accordance with the original 24 runes, nevertheless survived thanks to the power of tradition, even though the script only uses 16 characters? At present, I cannot take a definitive position on these two alternatives. I would merely like to emphasize that one does not necessarily exclude the other. It cannot be considered unreasonable that a new form of magic could have arisen, which in that case would have to be discovered in the future, but it is also conceivable indeed highly probable, that the old system of calculation, upheld in some places by a tenacious traditional belief in the power of antiquity, survived well into the age of the

younger futhark. Apart from the Röksten inscription, which due to its considerable length and the not inconsiderable number of difficult details cannot be subjected to analysis in this work, I have observed virtuoso examples of Old Germanic rune counting in the following two inscriptions: The damage poem discussed in § 45, 3 seems to have been composed solely for the purpose of word counting and then engraved using the simple rune counting method, executed exclusively with the characters of the younger runic alphabet.

1. On the so-called Sigtuna box (fig. 23 a) there is a runic inscription of the younger type, which v. Friesen in an essay in Fornvännen, 1912, p. 6 ff., read as follows (cf. fig. 23 b):

fuhl × *uAluA* × *slAit* × *fAluan* × *fankAuk* × *anasAu(k)A*(I transcribe here according to the system used for older runes; Friesen, op. cit., has *a* as a transcription for the *ár* rune and *ǫ* for the *áss* rune.)

According to v. Friesen (cf. also Magnus Olsen, Troldruner, p. 18), these words form a verse, which is interpreted as: "A bird tore apart the pale-faced robber; one saw the raven swelling." This is clearly a magical threat against anyone who might be tempted to steal the valuable copper vessel and the scales kept in it.

The numerical value of the magical row, calculated according to the number of runes in the original runic sequence, is: 53 (24 + 1 + 8 + 20 = *fuhl*) + 44 (1 + 11 + 20 + 1 + 11 = *uAluA*) + 72 (15 + 20 + 11 + 10 + 16 = *slAit*) + 68 (24 + 11 + 20 + 1 + 3 + 9 = *fAluan*) + 58 (24 + 3 + 9 + 5 + 11 + 1 + 5 = *fankAuk*) + 58 (3 + 9 + 3 + 15 + 11 + 1 + 5 + 11 = *anasAu[k]A*) = 353. Adding the numerical

value of 5 simple punctuation marks (the cross forms a unit), we get the number 358 = **2** × 179, a clearly demonic combination of numbers (179 is a prime number). This agrees with the fact that in front of the magical inscription discussed here and a longer sentence engraved in the upper bowl, the middle part of which is illegible, there is a large runic symbol of an ancient form. Its numerical value is **2**. Since the inscription also consists of 4 × 10 characters, the magical power of the runic symbol has also been invoked. It is likely that the upper row of runes, although it does not contain a magical verse, was also adapted so that the entire inscription on the object concealed a demonic or deadly number.

2. The runic inscription on the weaving shuttle from St. Michael's in Lund, found in a grave from the 13th century, in which a woman was probably buried, is undoubtedly magical in nature. Since Emil OlsonJfr Fornvännen, 1908, p. 14 ff. proposed a reading and interpretation of this inscription, it has been subjected to a thorough investigation by Magnus OlsenChristiania Videnskabs-Selskabs Forhandlinger, 1908, no. 7., who was the first to make the entirely correct assumption that the

skuᴀrᴀʀ : ikimᴀr : ᴀfᴀ : man : m͡n : krᴀt: ᴀᴀllᴀtti :

The first rune in the fourth group is only visible at the bottom, but there is no reason to doubt that the sign was an *m* rune. Both before and after the spell *ᴀᴀllᴀtti* there is a distinguishing mark consisting of two dots. Olson and Olsen did not consider it necessary to include this in their transcription. Since in letter mysticism a separator plays a more or less decisive role in determining the magical purpose of the entire inscription, I carefully examined the original preserved in the Cultural

History Museum in Lund in 1925 and was able to conclude with complete certainty that the separators, each consisting of two dots, are seven In the essay "Om runor och magi" (On Runes and Magic), published in Studier tillägnade Josua Mjöberg on September 11, 1926 (about a year after I discussed this inscription in a lecture), Torsten Wennström, unaware of my opinion, came to the same conclusion regarding the number of punctuation marks (cf. a. a., p. 261). (The seventh symbol also appears in the reproduction, cf. fig. 24). The first six groups of runes form a sentence which, in accordance with Olson and Olsen and Hjelmqvist, can be interpreted as "Sigvors-Ingemar shall receive my convincing explanation of the magical use of transferring one's own suffering onto others." See Hjelmqvist's convincing explanation of the magical use of transferring one's own suffering onto others in "Till runinskriften på vävplattan från Lund" in Studier tillägnade Esaias Tegnér, Jan. 13, 1918, 388 ff., esp. pp. 390 ff. 1918, 388 ff., especially p. 390 ff. The numerical value of the characters engraved on the plate should (assuming that the old tradition regarding runic numbers has been observed) be as follows: 61 (15 + 5 + 1 *skuArAR*) + 59 (10 + 5 + 10 + 19 + 11 + 4 = *ikimAr*) + 46 (11 + 24 + 11 = *AfA*) + 31 (19 + 3 + 9 = *man*) + 28 (19 + 9 = *m͡n,* a bindruna) +36 (5 + 4 + 11 + 16 = *krАt*) + 115 (11 + 11 + 20 + 20 + 11 + 16 + 16 + 10 = *AAllAtti*) = 376. Adding the numerical value of the separators, which should be 14 (= 2 × 7), we get the number 390 = 3 × 10 × **13.** This is the same number that we found hidden in the sum of the numerical values of all the characters on the golden horn from Gallehus (cf. § 47). In addition to the great magical number 13, this number also includes the number 10, the number of death and destruction (cf. § 61). Furthermore, the inscription consists of 39

= 3 × **13** characters (32 runes — including one bind rune — and 7 separators). The magical technique used, combining the number 39 with the number 10 of the ice rune, is thus perfectly suited to the purpose that can be gleaned from the words of the inscription. The numerical value of the spell that concludes the whole, 115, is equal to 5 × **23** and thus conceals within itself a demon-subduing number, the numerical symbol of the day rune. As in the inscription on the Golden Horn and in the futhark row of the Vadstena Bracteate, we find magic with the numbers 13 and 23. There seems to be considerable evidence that ancient runic magic secretly survived for a couple of centuries after the introduction of Christianity in the Nordic countries. Another example is a runic amulet from Maria Magle in Lund, described and interpreted by Wennström in the essay cited in note 1, p. 182. Its numerical value, if we use the old magical numbers, is: 10 + 9 + 1 + 5 + 11 + 20 + 1 + 2 + 11 (or 5?) + 4 + 15 = 89 (or 83?). In both cases, we get a prime number as the result, which is in line with the purpose of an amulet to protect against witchcraft. The addition of the Christian cross has parallels in the Anglo-Saxon area, cf. § 69.

B. INSCRIPTIONS OF MAGICAL (OR PROBABLY MAGICAL) CHARACTER, IN WHICH ONLY SIMPLE GEMATRIA CAN BE DETECTED OR IS PRESUMED

66. Above (§§ 47—65), I have examined 20 inscriptions (two of which contain younger runes) which, thanks to an often

extremely complicated letter magic technique, in my opinion clearly show that the old Norse runic magic did not merely as has been assumed until now, consisted of selecting a certain magically appropriate number of runic characters, but was rather a virtuosically developed branch of late antique gematria ("letter weighing," summing up the letter values of characters). Since, strictly speaking, every number from 1 to 24 had a magical meaning in runic magic and could therefore be used as the basis for a numerological inscription, inscriptions with simpler gematria cannot, in the strict sense, serve as evidence for the correctness of my theory. This does not mean, however, that an investigation of runic monuments of this type would be completely meaningless. If, through analysis of a series of first-rate magical inscriptions, we have succeeded in establishing the letter-mystical system used by the oldest Germanic runemasters, it is naturally of no small interest to see what meaning we can find in other magical inscriptions. In many cases, it should then become apparent that the numerical value that can be read from these simpler or partially defective inscriptions using the same system is in fairly good agreement with the purpose of the runic object or the meaning of the word or group of words carved on it.

67. Experts would agree that the majority of the following inscriptions had or could have had magical significance:

1. On a bone "meat knife," which probably served a ritual purpose, found in Fløksand in Norway, there are 10 runic characters carved. As is the rule in the following, exceptions are made only when, due to doubts regarding certain details, the appearance of the runes must be discussed in more detail. I

reproduce the runic inscription in transliteration: *lina laukaʀ a.* A reproduction of the original can be found in Norges Indskrifter, p. 649. The runes, which run from right to left, show no spaces between the words. The fourth rune is damaged at the top, and the last one shows a slightly different variant of the form of the *a* rune used in the previous word. However, following Magnus Olsen, I read it without hesitation as an *a*. The inscription thus consists of the word *lina* 'flax' and the word *laukaʀ* 'onion', to which an *a* rune has probably been added for gematric reasons. The last two runes in *laukaʀ* have been joined in a bind rune, so that the inscription now consists of 10 runes (cf. the northern inscription on the Björketorp stone, § 61). Flax and onions were important ingredients in the mystical practices of late antiquity in Greece and Rome and in the magical rites of the ancient Near East. Herodotus recounts that in Egypt, priests were only allowed to wear linen clothing and that the country's population had to remove their woolen cloaks when visiting temples and enter the sanctuary wearing only linen robes (cf. Lindskog's translation, part 1, pp. 120 and 136). Ammianus Marcellinus tells of a high treason trial during the reign of Emperor Valens in 371 AD, which was brought against two Romans who had sought to discover the name of the future emperor through sorcery, and provides certain details of interest to the study of magic, from which it appears that the two gentlemen, using a divination instrument on which the 24 letters of the alphabet were engraved, held sacred twigs in their hands and were dressed in linen garments. Cf. Martin P. Nilsson, Den romerska kejsartiden 2, p. 422, and Dornseiff, Das Alphabet, p. 154. In the north, flax was sacred to Frigg, and flax seeds were considered an infallible remedy against ghosts. See Henriksson, Växterna i de gamlas

föreställningar, seder och bruk, pp. 84 and 88. Equally ancient and significant is the role of onions in religion and mysticism. In an ancient Babylonian incantation, the peeling of an onion leaf by leaf is mentioned as a sacred act. Plutarch recounts in his work "De Iside" that the worshippers of Mazda, i.e. close relatives of the Mithra religion, practiced sorcery by crushing a type of onion in a mortar while invoking Hades (Ahriman) and darkness. Cf. Cumont, Die orientalischen Religionen, p. 225. Old Norse literature also provides several examples of the magical use of onions, e.g. Sigrdrífomál in the Edda and chapter 8 of the Volsunga Saga. Even in recent times, onions have played a role as an apotropaic agent in European folklore. Grimm, Deutsche Mythologie[3], p. 1031 (after Vuk), recounts that among the Serbian peasantry it was a common practice to rub onions ("Knoblauch") on the chest and shoulders to protect against witches. The belief in the protective power of onions against demons, witchcraft, and the evil eye is widespread throughout Europe. Cf. Scheftelowitz, Die altpersische Religion und das Judentum, p. 83, and Gessmann, Die Pflanze im Zauberglauben, p. 53. Magnus Olsen's assumption that the magical significance of onions in the Nordic region was of a particularly erotic nature seems to me to be unproven. See Linderholm, Nordisk magi, Sv. landsmålen, 1918, p. 81 f. In the Nordic region, too, onions, like flax, were probably used as a magical protective agent in general. — If, as in this case, the names of flax and onion were written and the *a* rune, sacred to the Aesir gods, was added, it was obviously to obtain a magical formula designed to protect a ritual implement. However, the magical power of such an inscription must also have lain in the numerical value of the characters. This is: 42 (20 + 10 + 9 + 3 = *lina*) + 46 (20 + 3 + 1 + 5 + 3 + 14 =

lauka͡ʀ) + 3(*a*) = 91, which is 7 × **13.** Thus, an extremely powerful magical combination of numbers.

lakaʀ and, on a separate line, the rune group *tanulu : aa.* The last rune, suggested by the frequently occurring magical rune group *alu,* has been interpreted as an *l.* However, there are two discernible side strokes. Although the lower one is quite faint, one can hardly agree with Bugge, Norges Indskrifter, p. 164, that it is "meaningless." The numerical values in the two rows of runes are: in the first: 20 + 3 + 1 + 5 + 3 + 14 = 46 = 2 × **23** (an anti-demonic number), in the second: 16 + 3 + 9 + 1 + 20 + 1 + 2 + 3 + 3 = 58 = 2 × **29** (a demonic number combination, 29 is a prime number). The total numerical value is: 46 + 58 = 104 = 8 × **13** (the great magical power number).

3. On a bracteate from Zealand, no. 20 in Stephens, the inscription *salusalu* is written in runic characters from right to left. I have already emphasized above that such a combination of sounds must be of a magical nature (cf. *tuwatuwa* § 48). The numerical value of the runes is 78 (15 + 3 + 20 + 1 = 39, repeated twice) = 6 × **13.** Thus, once again, the great magical power number.

4. On the well-known bracteate from Tjurkö in Blekinge (Stephens no. 25), two groups of runes run along the edge in a circle, separated from each other by two dividing marks, one consisting of two and the other of three circles (cf. fig. 25). The runes are clear and distinct (one of them — no. 9 from the end, discussed in more detail below — is, however, damaged at the top): ᚺᛖᛚᛞᚨᛉᚲᚢᚾᛁᛗᚢᛗᛁᚢ ⋯ ᚠᚢᛉᛏᛖᛉᚢᚾᛇᛉᚤᚨᚾ ᚠᛁᛚᚾᚨᚲᚢᛉᚾᛖ ⋰

h e l d a ʀ | k u n i m u d i u w u r t e | r u n o ʀ | a n | w l l h a k u r n e This inscription has been interpreted (cf. Noreen, p. 389) as: "Hjald ate Kunimund (cf. Old German *Chunimunt*) made the runes on the Welsian (i.e. Roman) grain (= gold, treasure)." The peculiar runic sequence *wllha-* has been interpreted as a mistake in the stamp, corrupting *walha-* (cf. Wimmer, Die Runenschrift, p. 213). v. Friesen, who subjected this bracteate to careful examination, offers an even more natural explanation: "When the pearl border of the bracteate was applied, the tops of the runes from *e* in *wurte* to the last *a* in *walha* were slightly damaged by the heat, causing the edge to melt and press inward toward the center of the bracteate. The first *a* in *walha* was particularly affected" (Lister- och Listerbystenarna, p. 65, note 1). A gematric analysis of the runic inscription confirms this interpretation. It shows that the mysticism of numbers is well suited to a warrior. Such a warrior or his son may have worn the bracteate as an amulet. "The tribute to the 'foederati' was paid in grain and gold, presumably according to need in one or the other or both; cf. Schmidt Allgem. Gesch. der germ. Völker p. 117 ff. **walhakorna* 'Roman grain' was probably the technical term among the Germanic peoples for this tribute," says v. Friesen in the above-cited work (p. 65, note 2). The numerical value of the first rune group is: 86 (8 + 18 + 20 + 23 + 3 + 14 = *heldaʀ*) + 79 (5 + 1 + 9 + 10 + 19 + 1 + 23 + 10 + 1 = *kunumudiu*) = 165 = 15 × 11; the second rune group: 46 (7 + 1 + 4 + 16 + 18 = *wurte*) + 50 (4 + 1 + 9 + 22 + 14 = *runoʀ*) + 12 (3 + 9 = *an*) + 78 (7 + 3 + 20 + 8 + 3 + 5 + 1 + 4 + 9 + 18 = *walhakurne*) = 186 = 31 × 6. The numerical value of the whole is: 165 + 186 + 5 (the numerical value of the separator) = 356. This number is 89 × **4,** which was Thor's number, and we

know that the Germanic mercenaries in the service of Rome primarily worshipped Hercules-Thor. The Norman historian Dudo also recounts that when the Northmen were about to go on a raid, they sacrificed to Thor (cf. A. Bugge, Vikingerne 2, p. 66). The number 356 is clearly a Thor number, as 89 is a prime number. This runic inscription probably contains a case of virtuoso gematria, i.e. the various subgroups of runes may also have a mystical significance: 11 is not only the number of fertility, but also the sacred number of Frö, who was invoked as a protector in battle (cf. § 40, 11). "Frö's game" was synonymous with 'battle' among the Norse skalds. Cf. A. Bugge, op. cit. 2, p. 49. The number 6 was probably Njord's number, but it was also the number of gifts (cf. § 22), and judging by the inscription, the brakteate was probably made to be given to Kunimund. Frö and Njord were closely related. However, the virtuoso feature is not entirely apparent here, which is why I have not discussed this inscription in the previous section. It is noteworthy, in any case, that the runic characters themselves conceal the sacred numerical symbols of the three oath gods of the North: Njord, Frö, and Tor.

5. On a bracteate from Fyn (illustrated in Atlas, p. 116, and discussed in Linderholm's work "Nordisk magi," Sv.

5. On a bracteate from Fyn (reproduced in Atlas, p. 116, and discussed in Linderholm's work "Nordisk magi" [Nordic Magic], Sv. Landsmålen 1918, p. 76) there is the following inscription, which can reasonably have no other purpose than numerical mysticism: *gil,* a triangular magical symbol, and above it *tbllll.* The numerical value of this inscription is 36 (6 + 10 + 20 = *gil*) + 113 (16 + 17 + 20 + 20 + 20 + 20 = *tbllll*) = 149 (a prime

number). The purpose of the amulet must have been to protect against witchcraft (cf. below).

6. On a runestone found in Nordhuglen in Norway, dating from around the year 400, which by all accounts was once erected as a standing stone (cf. Magnus Olsen in Norges Indskrifter, p. 606, where there is also an illustration), the following can be read in clear runes: Next to the last *i* rune, a depression can be seen, but this is probably of no significance. The following runic row, carved from right to left, reads: *ek gudija ungandiʀ i h* (where the inscription ends due to a piece of the stone being broken off). There are no spaces between the words. However, it is possible (cf. Noreen, p. 383) to reconstruct the text with some degree of certainty. The end should probably be: *i hugulu* (cf. the location where the stone was found). Calculating the numerical value of this, we get the number 199 = 23 (18 + 5 = *ek*) + 54 (6 + 1 + 23 + 10 + 11 + 3 = *gudija*) + 75 (1 + 9 + 6 + 3 + 9 + 23 + 10 + 14 = *ungandiʀ*) + 10 (*i*) + 37 (8 + 1 + 6 + 1 + 20 + 1 = *hugulu*). The number 199 cannot be evenly divided by any number higher than 1. An inscription with this number must therefore have been considered to have magical powers. This corresponds to the meaning of the words: "I, the priest (in Huglen), who cannot be affected by magic" (regarding the number 1, cf. § 40, 1 and § 45, 5). The content of the words already allows us to understand that this is a magical inscription.

7. On a Norwegian standing stone from around the year 500, found in Kjølevig, the following inscription can be read (cf. Noreen, p. 381), consisting of three lines (without word separation): *hadulaikaʀ — ek hagustadaʀ — h͡laaiwido magu minino,* which has been interpreted as: "Hadulaik (rests here). I,

Hagustald, honored my son" (cf. Bugge, Norges Indskrifter, p. 276, illustration on pp. 270 and 271). By combining the first runes in the third row into a bind rune, the inscription now consists of 40 runes, undoubtedly a magical number (10 × 4, cf. the custom of dedicating runes to Thor on monuments in later times). The peculiar spelling also suggests that a gematric purpose was intended. The numerical value of the first row is: 90 (8 + 3 + 23 + 1 + 20 + 3 + 10 + 5 + 3 + 14 = *hadulaikaʀ*); of the second row: 115 (18 + 5 + 8 + 3 + 6 + 1 + 15 + 16 + 3 + 23 + 3 + 14 = *ek hagustadaʀ*); of the third: 214 = 106 (8 + 20 + 3 + 3 + 10 + 7 + 10 + 23 + 22 = $\widehat{hl}$*aaiwido*) + 29 (19 + 3 + 6 + 1 = *magu*) + 79 (19 + 10 + 9 + 10 + 9 + 22 = *minino*); the total numerical value is thus: 419 (90 + 115 + 214). The number 419 is a prime number (cf. the previous runic inscription). The gravestone inscription was thus probably made for anti-demonic purposes. The second line, *ek hagustadaʀ*, also has an anti-demonic numerical symbol in its numerical value, the number 23 in the Dagruna (115 = 5 × 23). Finally, the third line has a demonic numerical value: 214 = 2 × 107 (a prime number). This therefore appears to be a case of more complex gematria.

8. On a Danish gravestone, the stone from Nørrenærå, probably from the period slightly before the year 850 (cf. Wimmer, Die Runenschrift, p. 358, illustration on p. 357), there is an inscription with runes of a younger type (the *m* rune consists of a main stem with a circle at the top). Although this monument belongs to a runic period that falls outside the actual scope of this thesis, I found it interesting to calculate its gematric numerical value. The inscription has a separator consisting of three dots, a circumstance that leads us to suspect a numerological purpose. The runic inscription consists of two

rows of runes, the latter divided into two groups by the aforementioned separator: *þurmutʀ* (and below) *niaut* ⦙ *kubls* = "Tormund. May the mark be of use to you." The numerical value of the first word is (according to old runic magic): 2 + 1 + 4 + 19 + 1 + 16 + 14 = 57; of the second: 9 + 10 + 3 + 1 + 16 = 39; of the third: 5 + 1 + 17 + 20 + 15 = 58. The total numerical value is thus 57 + 39 + 58 + 3 (the numerical value of the separator) = 157, a number that cannot be evenly divided by any number higher than 1, i.e. an anti-demonic number. This fits well with the purpose of a grave inscription.9. On a grindstone from Strøm in Norway, the following is written on one side: *wate h̑ali hino horn̑a*, which has been interpreted as "may the horn wet this stone" (cf. Magnus Olsen, Norges Indskrifter, p. 677 ff., where the inscription is found on p. 682). The numerical value of the runes in this group is: 44 (7 + 3 + 16 + 18 = *wate*) + 41 (8 + 3 + 20 + 10 = *hali*) + 49 (8 + 10 + 9 + 22 = *hino*) + 46 (8 + 22 + 4 + 9 + 3 = *horna*) = 180 = 9 × **20.** Here we have a case where there is every reason to assume that the runemaster adapted the inscription so that the magical number of water (the rune l) was hidden in the sum of the numerical values of the characters. For this reason, as is customary in several other inscriptions (e.g., hateka instead of haiteka on the Lindholm amulet), i has been omitted in *watie, as the verb form was most likely still pronounced when the inscription was made. See my dissertation Zur Geschichte des indogermanischen Neutrums, p. 49 f. The whetstone was clearly carried in a horn (in Silesia, reapers still carry their whetstones in this way today; cf. Norges Indskrifter, p. 688). On the other side of the stone is an inscription of corresponding length, which undoubtedly formed a poem together with the previous one. However, two runes are so badly

worn that they cannot be interpreted with certainty. I am therefore unable to attempt a gematric calculation of this part. The whole should have formed a verse with alliteration and the meter J- ^ J- w — ^ ~- w Each line consisted of four words. We therefore have reason to believe that the poem was of a galder-like character. The number four was sacred to Thor, who was also the god of fertility and was primarily worshipped by Norwegian farmers (cf. Mogk, Germanische Mythologie, p. 135: "Der Gott des Donners ist zu dem Gott des Ackerbaues geworden, mit dem sich der Nordgermane in erster Linie beschäftigte" [The god of thunder became the god of agriculture, with whom the North Germans were primarily concerned]). The fact that the inscription, with the help of bind runes, has fewer characters, 15 (instead of 17 in the first) and 14 (instead of 17) in the second line, is probably due to magical considerations. All the characters thus number 29, a prime number and therefore an anti-demonic symbol. Perhaps it is also no coincidence that the row whose gematria is based on the number of water (20) has the number of the sun (15) in the sum of the runic characters. Sun and water are, after all, the most important climatic factors for growing crops.

10. On a bracteate found in 1906 on Fæmø in Denmark (illustrated in Aarbøger for nordisk oldkyndighed, 1915, p. 176, fig. 2) the following runic inscription can be read (without spaces between the words): *ek fakaʀ f,* which has been interpreted as "I, Fakaʀ, wrote" (the rune *f* is probably to be understood as an abbreviation for *faihido,* cf. Noreen, p. 379). The numerical value here is: $18 + 5 + 24 + 3 + 5 + 3 + 14 + 24 = 96 = 4 \times$ **24.** Thus, the number of Thor, combined with that of wealth. In §§ 53, 54, and 60, I have previously discussed three brooches whose

inscriptions' gematria also correspond to the number 24. This is also the case with all brooches bearing the inscription *alu,* which I do not consider necessary to discuss here in particular. In the following, we will encounter a couple more examples of this type of gematria on lucky charms.

11. On a bracteate from Sogndal in Norway (Stephens no. 41 b, reproduced in Handbook, p. 180) are the runes: *RRRg.* The first two R runes are turned upside down, undoubtedly for a special magical purpose. The numerical value is $14 + 14 + 14 + 6 = 48 = 2 \times$ **24.**

12. On the bracteate no. 98 in Stephens (RM. 4, p. 74), the inscription should probably be read: *n R u* = $9 + 14 + 1 =$ **24.** However, the *n* rune is somewhat unclear (the crossbar does not appear to continue on the right side of the main stem). The bracteate has two additional groups of runes, the correct reading of which I have been unable to determine.

13. On the brooch from Etelhem on Gotland, the following phonetically peculiar cluster of runes can be read: *mkmrlawrtal.* In the last sign, some have wanted to see an *a* rune; however, its similarity to the *l* rune is considerably greater (it consists of a main stem with only one crossbar, which is slightly lower than usual; abbrev. in Stephens, Handbook, p. 13). The numerical value of the above runes is: $19 + 5 + 19 + 4 + 20 + 3 + 7 + 4 + 16 + 3 + 20 = 120 = 5 \times$ **24.** The brooch should thus have been worn as a good luck charm. The number 5 was probably combined with the number 24 to provide protection against the evil eye (cf. § 21). Some have interpreted the runes as *mik Marila worta* (= "Marila did me"), cf. Noreen, p. 378. However, I am skeptical of this interpretation. An inscription on an object worn as an

amulet may well have had no linguistic meaning whatsoever. The essential thing was the magical numerical value of the letters. The fact that 11 characters were carved is likely to have been intentional, as the number of fertility was probably thought to reinforce the number of wealth hidden in the gematria.

14. On the Reistad stone in Norway, one of our oldest runestones, dated by Bugge to the period shortly before 600, the following inscription is found (reproduced in Wimmer, Die Runenschrift, p. 210): *iuþingaʀ* (line 2:) $\widehat{ik}$ *wakraʀ : unnam* (line 3:) *wraita*. In the second line, the first two runes form a ligature, which I read with Bugge (in strict accordance with Wimmer's drawing) as *ik,* not (as Noreen, p. 385) *ek*. The vowel *e* may have had a more or less dialectal closed pronunciation, which would have justified writing it with the *i* rune when needed for gematric reasons. The use of a separator with two dots in the middle line suggests that the carver may have had a numerological purpose in mind. The numerical value turns out to be: 55 (10 + 1 + 2 + 10 + 9 + 6 + 3 + 14 = *iuþingaʀ*) + 51 (10 + 5 + 7 + 3 + 5 + 4 + 3 + 14 = *ik wakraʀ*) + 2 (numerical value of the separator) + 41 (1 + 9 + 9 + 3 + 19 = *unnam*) + 43 (7 + 4 + 3 + 10 + 16 + 3 = *wraita*) = 192 = 8 × **24.** Thus, the great number of prosperity. At the same time, however, it is also a Torstal 192 = 48 × **4.** The runestone is probably dedicated to Tor and entrusted to his protection. Bugge and Wimmer interpret the first line as the name of the person in whose memory the stone was erected. The rest should be interpreted as "I, Wakraʀ, performed (*unnam*) the carving (*wraita*)".

15. On the beautifully and clearly carved bracteate from Skodborg (Stephens no. 67, reproduced in Handbook, p. 190),

the following inscription runs in a ring along the edge, which I have divided into word elements for clarity in the transliteration: *auja alawin auja alawin auja alawin j alawid*. The word *auja* means 'happiness', *Alawin* and *Alawid* are probably names; the *j* rune has been interpreted as an abbreviation for *ja* 'and' (cf. Noreen, p. 386). However, it seems more likely to me that it is a loan rune, which, like the same rune on the Stentoften stone, should be read with its name, i.e. a Nordic *jāra (the inscription is from the 5th century) with the meaning 'good year, good harvest'. This fits well with the word *auja* 'happiness'. The numerical value of the inscription's 3 *auja* is 54 = 3 × 18 (3 + 1 + 11 + 3), the numerical value of its 3 *alawin* is 156 = 3 × 52 (3 + 20 + 3 + 7 + 10 + 9), to which we add the numerical values of the *j* rune = 11 and *alawid* = 66 (3 + 20 + 3 + 7 + 10 + 23). Adding these numbers together, we get: 54 + 156 + 11 + 66 = 287 = 41 × **7.** The word *auja* 'happiness', which appears three times in the inscription, is synonymous with the name of the rune for the number 7 (ags. *wyn* 'pleasure', cf. § 23). Since the number 41 cannot be divided evenly by any number higher than 1, the number 287 is in an eminent sense a lucky number. Since runic magic arose in a Mithraic environment, we should expect quite a few amulets with inscriptions of this type of number mysticism. A number of examples show that this is indeed the case. The bracteate from Næsbjærg (Stephens no. 80), which I have already discussed above (cf. § 59), has the number 7 hidden in two magical groups of runes: *lpl* = 42 = 6 × **7** and *tk* = 21 = 3 × **7.** Simpler gematria show the following cases:

16. On a bracteate from Norway from around 500 (Stephens no. 48) there is a clearly purely magical rune group, ending with a bind rune: *anoan̂a*. The numerical value of these runes is: 3 + 9

+ 22 + 3 + 9 + 3 = 49 = **7** × **7.** The fact that the runes form a five when a bindruna is used may be due to the magical power of this number against the evil eye (cf. § 21).

17. On a bracteate found in Wapno in Posen (Stephens no. 93, reproduced on p. 73 in RMThe abbreviation RM here and in the following = The Old-northern Runic Monuments of Scandinavia and England.. 4) is the inscription *sabar* in clear runes running from right to left. The word can hardly have any other meaning than magical. The numerical value of the five runes (cf. above) is: 15 + 3 + 17 + 3 + 4 = 42 = 6 × **7.**

18. On a bracteate from Skrydstrup in Denmark from the early 500s (illustrated in Wimmer, Sønderjyllands runemindesmærker, p. 23, no. 2), the rune group *laukaʀ* and the rune group *alu* can be read on separate lines. The numerical value is 46 (20 + 3 + 1 + 5 + 3 + 14) + 24 (3 + 20 + 1) = 70, i.e. 10 × **7** (the number 5 is also hidden in the gematria of the inscription).

19. On a metal ornament, slightly damaged at the top, found in Engers, Hessen-Darmstadt, now kept in England (see Stephens RM. 4, p. 63; Aarbøger, 1894, p. 49), there is the runic inscription *leub*. Its numerical value is 20 + 18 + 1 + 17 = 56 = 8 × **7.**

20. On a metal ornament found in Bezenye in Hungary (see Stephens RM. 4, p. 67; Aarbøger, 1894, p. 27), the rune group *segun* can be read on the right-hand edge, whose numerical value is: 15 + 18 + 6 + 1 + 9 = 49 = 7 × **7** (the inscription on the left-hand side cannot be read with complete certainty).

21. On a badly damaged shield boss from around the year 300, found in Thorsbjærg in Denmark, the rune group *hʀgsia* is

very clearly engraved with a sharp object (abbr. in Wimmer, Sönderjyllands runemindesmærker, p. 15). For phonetic reasons, it is clear that this cannot be a real word or name. The runes therefore most likely form a combination with a purely magical meaning. The numerical value is: 8 + 14 + 6 + 15 + 10 + 3 = 56 = 8 × **7.** (However, the *a* rune does not appear entirely clear to me.) The combination also contains the powerful number of Thor: 56 = 14 × **4.**

22. On three bracteates from Faxø in Denmark (Stephens no. 14, reproduced in Handbook, p. 171), joined together into a single large ornament by a ring-bearing metal rod, the rune group *ualsof* appears on each bracteate. This large ornament must have been worn by a woman. The numerical value of the inscription further confirms this. It is: 1 + 3 + 20 + 15 + 22 + 24 = 85 = 5 × **17.** Like the Charnay brooch, the magical runic inscription conceals the number of the birch crown, which must have been sacred to Frigg, the helper in childbirth and other purely female concerns (cf. § 31 and § 44, 4). Since the number 5 is also hidden in the inscription, it was probably intended as protection against the evil eye (cf. § 21).

23. On a bracteate from Trollhättan (Stephens no. 27, reproduced in Handbook, p. 176), the rune groups *tawol aþodu* are seen. This inscription has been read as *tawo laþodu* and assumed to refer to a love gift (cf. Noreen, p. 390). The numerical value of the runes is: 16 + 3 + 7 + 22 + 20 + 3 + 2 + 22 + 23 + 1 = 119 = 7 × **17.** Thus, fertility. An amulet from Glostrup in Denmark (illustrated in Stephens, Handbook, p. 92) bears the runes *tu* = 16 + 1 = **17.** and the number of luck combined.

24. On a sword scabbard from Vi, the word *makia* 'sword' is engraved on one side, and on the other, the runic combinations *mariha* and (on a separate line) *iala*, which sound like magic spells. The numerical value of the inscription on one side is: 19 + 3 + 5 + 10 + 3 = 40 = 10 × **4** (the number of Thor). The numerical value of the inscription on the other side is: 19 + 3 + 4 + 10 + 8 + 3 + 10 + 3 + 20 + 3 = 83, a prime number. This mystical-sounding combination of runes (from which Lindquist, Galdrar, p. 114, has attempted to extract a linguistic meaning) thus conceals an anti-demonic number. The numerical value of all the runes on the object is: 40 + 83 = 123 = 3 × 41 (a prime number: according to Lioðatal, the number 3 has the ability to dull the sting, cf. § 40, 3). Abbreviation in Aarbøger, 1905, p. 145.

25. On the famous Gothic gold ring from Pietroassa, now in a damaged condition and kept in the museum in Bucharest, there was, according to eyewitness drawings (cf. Stephens, Handbook, p. 203) with large, powerful runes engraved ᚷᚢᛏᚨᚾᛁᛟᚹᛁ ᚾᚨᛁᛚᚨᚷ with a clear space between the 9th and 10th runes. This inscription has been interpreted (cf. most recently Karsten, Germanerna, p. 137) as "dedicated to the Jupiter of the Goths." We now know that the Romans and Germanic peoples identified Odin with Mercury and Thor with Jupiter (cf. Wednesday = *dies Mercurii,* Thursday = *dies Jovis*). The abbreviation *gutan* before *iowi* indicates a numerological purpose and is reminiscent of similar abbreviations on the Mithraic monuments in the Roman army camps (cf. §11 ff.). We have seen that the Mithraists used gematria especially in the part of the inscription where the invoked god had his name. The numerical value of the rune group *gutaniowi* is 6 + 1 + 16 + 3 + 9

+ 10 + 22 + 7 + 10 = 84 = 21 × **4** (Thor's sacred number). The number 84 is also = 7 × 12. The rune group *gutaniowi* thus exhibits the same alphabetic-magical numerical relationship as the inscriptions MYTHRÆ and DI MITHRAE on the Mithraic monuments (cf. § 15 above). It thus appears that the Goths had a runic formula dedicated to their chief god engraved, modeled on the letter combinations that the worshippers of Mithras compiled when they praised the deity they invoked above all others. In other respects, the letter mysticism in this Gothic runic inscription, like the practice in the Mithraic religious inscriptions, is probably of a simple, purely letter-counting nature. The numerical value of *hailag* is 50 (8 + 3 + 10 + 20 + 3 + 6), and the numerical value of the entire inscription is thus 134 (a number that can only be divided evenly by 2). However, the total number of runes is 15 (the sacred number of the sun), *gutaniowi* consists of 9 runes and *hailag* of 6 runes (the number of miracles 9, the number of gifts 6). This runic inscription was probably carved on the large ring of the Goths at a time when contact with Mithraism, which had its headquarters in Dacia, was still open or belonged to the recent past. In the first period of runic magic, it was generally sufficient to imitate the monumental inscriptions of the Mithraists. Virtuoso runic magic probably developed somewhat later or was initially mastered only by a very small number of runologists.

26. On the bracteate no. 33 in Stephens (abridged Handbook, p. 178), the runic inscription *ota* can be read, with the characters running from right to left. The numerical value of these three runes is: 22 + 16 + 3 = 41. This is, as a prime number, an anti-demonic number (cf. points 5–8 above). This bracteate should therefore have been made as protection against

witchcraft. This is also supported by the fact that the three runic characters at the top bear round circles, a symbol that can most likely be assumed to refer to protection against the evil eye. Drawing an eye or an eye-like magical sign is a means known in the magic of many peoples against the evil eye. Greek letters with round circles at the tips can be found on the magical Sethian lead tablets, which have been discussed in detail by Wünsch in his interesting work "Sethianische Verfluchungstafeln aus Rom" (Sethian Curse Tablets from Rome). See this work, p. 10 at the bottom and p. 11 at the top. I have highlighted a series of other striking similarities with the runic characters in my study Der Ursprung der Runenschrift und die Magie (Archive for Nordic Philology 43, new series 39, p. 97 ff., cf. in particular p. 108 f.). The similarity between the mystical runic formula *ota* and the Egyptian hieroglyph *ut'a*, which was used against the evil eye (cf. Elworthy, The Evil Eye, p. 126), is peculiar, but may be a coincidence.

27. On the bracteate no. 68 in Stephens, we find the rune group *alu* and the rune group *hag*. Their numerical values are: 24 + 17 (8 + 3 + 6) = 41. Thus, the same anti-demonic number as in the above-mentioned *ota*. Reproduced in Handbook, p. 190.

28. On the bracteate no. 46 in Stephens (illustrated in RM. 4, p. 72), we find the rune group *uft*. Its numerical value is: 1 + 24 + 16 = 41, i.e. the same anti-demonic number as on the two amulets discussed above.

29. On the runestone from Belland (6th century), which according to Wimmers and Bugges' assumption (cf. Norges Indskrifter, p. 215) was originally placed inside a burial mound, the rune group *keþan* can be read, which has been interpreted as

a name. According to Bugge's examination of the stone, these runes "from the beginning" probably constituted the entire inscription on the stone (Norges Indskrifter, p. 210, illustration on pp. 211 and 212). The numerical value of the five runes is: 5 + 18 + 2 + 3 + 9 = 37, a number that cannot be evenly divided by any number higher than 1, thus an anti-demonic number. This fits well with an inscription that would have served as protection against the powers of darkness. It can certainly be argued that this is probably a name. However, it can be countered that this short name was chosen because the numerical value of the runes had this magical character. Otherwise, the combination of runes would have been longer.30. On a small stone from Kinneved in Västergötland (illustrated in Stephens, RM. 3, p. 21), there is a row of runes running from right to left along the upper edge: *siraluh,* which is definitely a magical inscription (perhaps from the 600s, cf. Noreen, p. 381). The numerical value of the seven runes is: 15 + 10 + 14 + 3 + 20 + 1 + 8 = 71. The total numerical value is a prime number. The inscription, which is slightly damaged on the right, was probably made for anti-demonic purposes.

31. Finally, in this context, I must examine from a gematric point of view an undoubtedly magical group of runes, which is not preserved as an Old Norse inscription, but as a spell recorded in an Icelandic book of black magic, where much may go back to ancient runic magic. On p. 72 of "An Icelandic Book of Black Magic from the 16th Century, published with translation and commentary by Nat. Lindqvist," the following magical recipe: 'Skriff desser staffer a kalffskind huit med blod þinum tag blodet paa Laaret og mæl, Rist æg þ(ier) Otte ausse Naudir Nije Þossa ðretten' = (in the publisher's interpretation) "Write these spells

on white calfskin with your blood; take the blood from your thigh and say: 'I carve eight 'áss runes', nine 'naud runes', thirteen 'Þurs runes'. — The purpose of the magical operation is then stated: — 'which may torment your belly with pus and wind'. This clearly refers to the following group of runes:

aaaaaaaannnnnnnimnþþþþþþþþþþþþþ.

The numerical value of 8 *a*-runes is 8 × 3 = 24; the numerical value of 9 *n*-runes is 9 × 9 = 81; the numerical value of 13 *þ*-runes is 13 × 2 = 26. Both 24 and 81 as well as 26 are magical numbers of the first rank. Compare in particular the 8 *a*-runes on the Lindholm amulet and the rune group *tawido* with the numerical value 81 on the Golden Horn, in whose gematria the number 13 dominates. The numerical value of all 30 runes, which contain the number of the harmful ice rune (10) three times, is: 24 + 81 + 26 = 131. This is a prime number. Since healing power was believed to lie in the number 2 (cf. § 40, 2), the disease-causing formula was constructed so that the number 2 would have no power against it. It may be of interest to mention that it was while studying this rune formula, compared with the Lindholm amulet and its identical row of *a* runes, that I came up with the idea that the numerical values of the runes were not directly dependent on the order of the futhark, but that a rearrangement had taken place, which concealed the foundation of runic art from all uninitiated. It struck me that if one counted the *a* rune as 3 (which corresponded to Near Eastern magic), the combined numerical value of the 8 runes was 24, which I knew to have been of particular importance in Old Norse numerology. A calculation of the rune groups on the

Lindholm amulet then showed that the number 24 was included in a series of combinations: *alu* etc.

C. DEFECTIVE INSCRIPTIONS OR INSCRIPTIONS WITH RUNES OF PROBLEMATIC VALUE

68. My above-completed investigation of about fifty inscriptions from the older runic period and certain interesting individual runic monuments from a somewhat later period should have shown that the series of numerical values I established at the beginning of this chapter can be used in a fully satisfactory manner in and for the mystical interpretation of the remaining traces of ancient Germanic runic magic. The results we have arrived at cannot—insofar as one is willing to view the whole in its context—be regarded as merely the result of chance. Anyone who has thought about the problem in some detail should be able to see that the runic magic, which was held in such high esteem in its time, must have consisted of something, and that this something cannot have been as simple as mere letter counting. Judging by the Edda poems and ancient sagas, the ability to carve runes correctly was an art that required insight that only a few possessed. Runic magic undoubtedly originated in the letter mysticism of late antiquity, and the ancient Germans must therefore have adopted the art of gematria, the method of combining written words with reference to the total numerical value of the letters used, from their Eastern Roman teachers.

Before leaving the subject of this thesis, I must briefly indicate my position on certain runic inscriptions which I have not considered worth examining in a preliminary investigation, and finally present my view on a number of problematic cases.

Among the runic monuments of a magical nature, which I must pass over at present, the Rök stone is particularly noteworthy. Bugge has already established that letter counting was observed when the runes were inscribed on this stone in a number of rune groups, cf. most recently Pipping, Om runinskriften på Rökstenen (1919), pp. 1–5. I consider it highly probable that gematria was also applied.

was also used. However, in order to determine this with certainty, it would be necessary to examine the original very carefully. Judging from the photographs I have studied (the newest and best are published by v. Friesen, Rökstenen [Stockholm, 1920]), it appears that the carver used certain otherwise unnecessary binding runes to achieve a gematric result in certain lines. This is the case, for example, in the first and second lines. The third rune in the first line, *a* in *stantᴀ*, appears to consist of three side strokes. Perhaps it should therefore be interpreted as a ligature of *a* = 3 and *n* = 9. The third rune in the word *fᴀþi* in the second line has an upward side stroke. It appears as if a ligature of a *þ* rune and an *ᴀ* rune has been carved in, in which case the sign must be counted as the possessive numerical value 13 (11 + 2). Such double writings in certain words (*sta͡ntᴀ, fᴀᴀ͡þi*) lead us to suspect that, at least in some runic rows, gematric techniques have been applied. Without having undertaken a thorough examination of the runestone itself, I cannot express an opinion one way or the other, much less

provide an analysis of the gematric relationships. As a stand-alone offering, the Rök stone must be set aside for the time being as a problem of enormous scope.

The Eggjum stone is also of a magical nature. Judging by all appearances, a Galder-like poem has been carved into it. Unfortunately, many of the runic characters in this inscription are not entirely legible. Ivar Lindquist will soon publish a new interpretation of the Eggjum inscription. At this stage, I am unable to offer any assessment of the runic magic of this inscription.

Even older (from around 400 AD) and of a clearly magical nature is the inscription on a bone tool from Gjersvik in Norway. However, the second and third runes are missing, and no one has yet been able to propose a reconstruction. The situation is largely similar with a series of other runic inscriptions that I have omitted from this work, especially those carved in stone, such as the inscriptions on the Tune Stone in Norway, the Rösten Stone in Sweden, and others. In other cases, we are dealing with strange intertwining of runic characters, where a reliable identification of all the characters seems an impossible task, e.g., the stone inscription B in Tørviken in Norway (reproduced on p. 285 in Norges Indskrifter). In a few cases, however, it may be worthwhile to attempt a discussion of certain inscriptions whose reading has not yet been determined with certainty. It should be mentioned that a few more of the runic inscriptions not discussed here can be calculated with greater or lesser probability. The simple gematria, however, is of little interest. I provide some examples below, emphasizing that these are not even secondary evidence for what I consider to be my supporting material.

whsbidulz͡ll This probably includes, as already noted, the word *sbidul* = *spinðul* 'fibula' (cf. fht., ags. *spindel*). I differ from previous researchers in that I see a *w* rune in the first character of the row, not an *i* rune. The sign is clearly marked with a "half moon," although it has been reversed in relation to the other signs in the group and is pointing in a different direction (as in the next group: this occurs quite often in inscriptions of a magical nature). The penultimate rune in the group, φ, is a bind rune. This has previously been read as a *t* rune, but I see it here as a combination of the rarely used rune n:r 13 φ and the rune ᚱ. The person who carved the runes was clearly very familiar with the entire runic alphabet (in a subsequent group, there is also the extremely rare *p* rune). The numerical value of this (probably first carved) runic row is, according to the above reading: 7 + 8 + 15 + 17 + 10 + 23 + 1 + 20 + 13 + 20 + 20 = 154 = 22 × **7.** Next to the first row are two shorter rows running perpendicular to it. The upper row consists of the runes *uhskw* with the numerical value: 1 + 8 + 15 + 5 + 7 = 36; the lower row contains the runes *ʀlkslj,* which have the numerical value: 14 + 20 + 5 + 15 + 20 + 11 = 85. In the middle of the brooch, in an isolated position, is an *a* rune, numerical value = 3. Finally, there is the runic row *esbrsjpsʀji* with the numerical value: 18 + 15 + 17 + 4 + 15 + 11 + 12 + 15 + 14 + 11 + 10 = 142. The total numerical value is thus: 154 + 36 + 85 + 3 + 142 = 420 = 60 × **7.** According to this interpretation, the buckle should have been consecrated as a good luck amulet (cf. § 67, 15 ff.). The inscription was probably made in such a way that a person knowledgeable in runes first carved the word *sbidul* = *spinðul* 'buckle' half-heartedly, and then filled in the row with runic characters, so that a group of 10 characters appeared with the numerical value 154 = the lucky number 7, multiplied by 22

(the number of the inheritance rune). The runologist then had the idea of decorating the entire back of the buckle with runes and finally stopped when he arrived at a number that was ten times the number associated with gifts and good luck. The number 10 was probably intended as protection against thieves. It should be added that v. Friesen, Röstenen, p. 120, interprets the sixth and seventh runes in the last group as *ŋ* + *j* (= *a*).

wiþrz, the second of *funþ* and the third only of the rune *ʀ*. I read the last rune of the first line as the rune ∧ (*z*), no other rune corresponds better to the appearance of the sign (cf. fig. 27). Magnus Olsen, cf. Christiania Videnskabs-Selskabs Forhandlinger, 1907, no. 6, has interpreted this letter variant as an *a* rune. This gives him the interpretation: *wiþr ᚨfunþ* = 'against envy'. However, it is by no means certain that a magical inscription always consists of words. We have already encountered several cases where magical inscriptions — both late antique and ancient Germanic — consisted entirely or partly of non-word-forming letters, put together with regard to the numerical value thus obtained. This may also be the case with this magical inscription. I therefore read the characters in accordance with the letter forms of the original as far as possible, thus the last rune in the first row as ∧ (the variant ? relates to ∧ as ᚴ relates to the normal ↑). The numerical value of the first line is: 7 + 10 + 2 + 4 + 13 = **36;** of the second line: 24 + 1 + 9 + 2 = **36;** of the **third:** (*ʀ*) 14. We thus find that the first and second rows, read in accordance with the appearance of the characters without any distracting attempt to find linguistic meaning, give the same number and, in addition, a number of unambiguous magical type 36 = 2 × 18 (the lucky number, combined with Odin's number). The numerical value of the entire magical inscription is 36 + 36

+ 14 = 86 = 2 × 43. Since the number 43 is a prime number, the number 86 is a demonic number. The stone was probably intended to be used for practicing black magic. This is, of course, assuming that my interpretation is correct. In support of this, it can be noted that on a bracteate from Skåne (Stephens no. 26), the rune group *fuþ* can be read, and its numerical value is: 24 + 1 + 2 = 27 = 3 × **9.** By inserting an *n* rune, the formula has been extended without altering its central number, the powerful magical Ananke number 9.

3. On an iron spearhead with silver inlay from Kovel in Volhynia, there is a runic inscription of an ancient, probably Gothic type, which has so far been read as *tilarids*. However, I see no reason whatsoever in the history of the alphabet to agree with Wimmer (Die Runenschrift, p. 109) in reading the penultimate letter as a *d* rune. The sign only has the shape of a square (cf. fig. 28). It therefore seems most natural to me to interpret it as a *ŋ* rune, as Lindquist does in Galdrar, p. 84 (the similarity to the *ŋ* rune on the Kylverstenen is highly significant, only the size in relation to the surrounding signs is different). The reading *tilariŋs* should therefore be considered. The numerical value of this rune group is: 16 + 10 + 20 + 3 + 4 + 10 + 21 + 15 = 99, which is 11 × *9*. The inscription thus conceals the number of the magic rune associated with Odin. Odin was, as is well known, the god of spears (cf. Segerstedt, Nordiska vapengudar [Nordic Gods of War], in Skrifter tillägnade Pehr Eklund [Writings dedicated to Pehr Eklund], p. 676 ff.). That a throwing weapon was dedicated to him through its runic inscription seems highly natural. The number 11 is Frö's number. His number was probably considered to protect his life in battle (cf. § 40, 11).

4. As is well known, the long and undoubtedly magical inscription on the spear shaft from Kragehul in Denmark is unfortunately defective. However, on the preserved piece of the spear shaft we find the runic combination V" three times (cf. Wimmer, Die Runenschrift, p. 124). The numerical value of this magical combination of characters is 6 (*g*) + 3 (*a*) = **9.** This is therefore a number associated with Odin. I conclude from this that the entire inscription probably had a numerical value in which the number 9 was hidden.

5. The spearhead from Øvre Stabu in Norway bears an inscription, which is unfortunately defective. One can read the runic sequence *raunija* (although the penultimate character may be a *ŋ* rune). After that, marks of two additional runic characters can be discerned (cf. the illustration in Norges Indskrifter, p. 416). We are therefore unable to calculate the gematria that must originally have been hidden in this ancient inscription (cf. § 17). It is interesting to note, however, that the runic characters appear to have been **9.**

ranŋa, later *ranja*. The first character has been interpreted (cf. Henning, Die deutschen Runendenkmäler, p. 9) as an *r* rune. However, one may be uncertain whether this character should rather be interpreted (with Dietrich and Stephens) as a *u* rune. On the twin spear from Kovel, the *r* rune has a completely different, more strongly curved form. If we try reading *uanja*, we get the numerical value: 1+ 3 + 9 + 11 + 3 = 27 = 3 × **9.** This is a number associated with the spear god Odin. One could object to this reading, arguing that the rune ᚹ should precede a vowel, not ᚾ. However, this can be countered by pointing out that a

completely analogous spelling has been found on the Gothic gold ring from Pietroassa (cf. § 67, 25): *iowi* instead of **jowi.*

The Gothic runic inscriptions undoubtedly belong to the earliest period of the ordered runic alphabet. Before this, however, as I have explained in more detail in a separate essay (cf. Arkiv f. nord. fil. 43, new series 39, pp. 97–109, a more primitive stage of writing existed among the Germanic peoples near the Roman border, whose wooden memorials have not been preserved for posterity. During this stage (with a script adopted from the Latin alphabet), no distinction was probably made between *i* and *j, u* and *w* (and there were also no special characters for *ŋ* and *þ*). It was only when Germanic mercenaries in the army camps of the Eastern Roman Empire (perhaps in Dacia) became acquainted with the Greek alphabet that the so-called older Futhark was created, i.e., a Germanic alphabet consisting of 24 characters. Following the Greek model, certain strictly unnecessary letters were added to expand the Germanic written characters to 24. The rune ↶ (*j*) was formed after the Greek ligature for *ει* (pronounced *i*). After a defective Greek *B* with a weakly marked lower "half moon," the rune ᚹ (*w*) emerged. A *π* with curved stems (Π) is likely the prototype for the rune ᛉ, placed on its side for convenience. After the Greek double gamma (= *ŋg*), a Germanic sign was formed, whose oldest known form [] is probably found on the spearhead from Kovel (cf. above). However, if a more primitive stage of writing preceded the first period of the futhark, a certain hesitation in orthography may have lingered from earlier writing habits. I see evidence of this in the Gothic runic combinations *iowi* and *uanja*. In order to achieve a certain numerological result, an older (probably still used in wood writing) notation system was used.

The ornamentation of the Müncheberg spear also indicates 9-number magic: around a ring to the left of the base of the actual spearhead, there are 3 groups of 3 small circles around a larger ring, making a total of 9 such circles. Cf. the connection between the numerical values of the groups of runes and the numerical ratios of the ornamentation on the Golden Horn (§ 47) and on the Thames knife (§ 51 and § 70).

D. SOME ANGLO-SAXON INSCRIPTIONS OF UNQUESTIONABLY MAGICAL CHARACTER

69. In § 51, I have discussed a case of Anglo-Saxon runic magic, the extremely artistic gematric combination that is revealed if one calculates the mystical role of the 28 Anglo-Saxon runes according to the most obvious principle of explanation. That these should have had the numerical values 1–28 in order, beginning with the *u* rune and ending with the *ea* rune, is an assumption whose high probability is obvious. The latter, even longer alphabet with 33 characters should, if used magically, have had numerical values from 1 to 33. In order to achieve certainty in this matter, further material is of course necessary. While this study was being prepared for publication, I received the British Museum's Guide to Anglo-Saxon Antiquities (1923) from London, where I found modern reproductions of Stephens' illustrations (RM. 3, p. 217 f.), which in many details are less faithful to the originals. of two runic objects of unmistakably magical character. Two magical rings kept in the aforementioned museum bear inscriptions consisting

of Anglo-Saxon runic characters of such a peculiar phonetic nature that the meaning of the letters must be sought in a related mystical system of numbers.

k^2) the runic group after the cross is as follows:

æ r k² r i u f l t k² r i u r i þ o n g l æ s t æ p o n .

The numerical value of this group (cf. the calculation in § 51) is: 26 (æ) + 4 + 31 (k²) + 4 + 10 + 1 + 24 + 20 + 16 + 31 (k²) + 4 + 10 + 1 + 4 + 10 + 2 + 3 (o corresponds to the Nordic a) + 9 + 6 + 20 + 26 (æ) + 15 + 16 + 26 (æ) + 12 + 3 (o) + 9 = 343 = 7 × 7 × 7 (the lucky number!). Inside the ring, the three runes *tol.* can be read. The numerical value of this group is: 16 + 3 + 20 = 39 = 3 × **13** (a prime number and a strongly magical round number). The total number of runes on the outside of the ring is, as mentioned above, 27 = **3** × **3** × **3**. This harmonizes with the **3** runes on the inside and the gematric numerical value of 7 × 7 × 7 on the outside. This is likely a case of Christian magic using Anglo-Saxon runes. For a certain period of time, particularly in northern England, a peculiar mixture of Christian and pagan beliefs was revered by the ruling class. Cf. A. Bugge, Vikingerne 2, p. 263 f. and p. 291 f.. The same kind of combination of the cross sign and a runic formula can be seen on the amulet from Maria Magle in Lund (cf. p. 131, note 1).

i o ᵹ² . e r y . r i . u f . d o l . y r i . u r i . þ o l . w l e s . t e . p o t e . n o l

(the last two *i*-runes are, however, bent in a peculiar way; I have nevertheless read them as *i*-runes in accordance with the British Museum catalog; the Anglo-Saxon *s*-rune has a

completely different form). The numerical value of these runic characters is: (28 + 33) + (18 + 4 + 27) + (4 + 10) + (1 + 24) + (23 + 3 + 20) + (27 + 4 + 10) + (1 + 4 + 10) + (2 + 3 + 20) + (7 + 20 + 18 + 15) + (16 + 18) + (12 + 3 + 16 + 18) + (9 + 3 + 20) = 61 + 49 + 14 + 25 + 46 + 41 + 15 + 25 + 60 + 34 + 49 + 32 = 451. Adding the numerical value of the 11 distinguishing marks, we obtain the number 462 = 66 × **7**. Thus, once again, we have magic with the lucky number.**70.** (Addendum to § 51.) In the British Museum's aforementioned catalog (as fig. 117), there is a reproduction of the so-called Themsen knife ("The scramasax from the Thames"). The runes appear less clearly in this illustration than in the older reproduction, which (according to Wimmer, Die Runenschrift) has already been included in this work (fig. 15). On the other hand, the image in question shows the entire miniature sword with all its ornamentation. I therefore reproduce it here as fig. 32, as very few runologists outside England are likely to have had the opportunity to see a complete illustration of this remarkable runic monument. In addition, the ornamentation as a whole is of interest. I have previously pointed out that after the group of runes, which in itself conceals the number **17**, there follows an ornament consisting of **17** squares. If we now examine the ornamentation as a whole, we see that after the square pattern there is an ornament separated from the other group of runes, containing 34 = 2 × **17** dark indentations.

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SUMMARY

The author's aim is to set forth the mystical system of numbers found in the runes, and to show their connection with the alphabetical magic of the late Greeks and Romans.

In Chapter I, a number of Greek and Roman inscriptions showing the characteristics of alphabetical magic are analyzed and discussed. In several cases, it can be shown that incantations of this sort are addressed to some particular god, and it can usually be assumed in these cases, with more or less certainty, that the holy number of the god in question lies hidden in the sum of the numerical values of the letters used. The holy numbers of the gods are connected with the order of the days of the week of the late Greeks and Romans. (Cf. § 3.) Christian inscriptions must naturally be explained according to some other mystic-numerical principle. For instance, the number 5 would seem to be the symbol for the 5 wounds of Christ and their miraculous power, the number 4 the symbol for the cross. (Cf. § (3, 5 and § 8, 2—4.) Alphabetical magic can be shown in certain of the writings included in the Books of the New Testament; this is especially true of the Apocalypse. The meaning of the number 616 and its variant 666 can be explained according to the same principle as the Christian inscriptions. (Cf. § 7 f.) The second part of the chapter is devoted to a thorough discussion of the alphabetical magic in the inscriptions from the cults of Jupiter Dolichenus and of Mithra.

In Chapter II a new theory is suggested for the origin of the older series of runes. The author has come to the conclusion that

the *fuþark* — that is, the runes as an ordered whole — was composed entirely for some magic-mystical end. The arrangement of the *fuþark* series is the alphabetical order of the old Germans in disguise; the *f*-rune did not, in fact, stand at the beginning of the rune alphabet, as is believed. That alphabet really began with the following *uf*-rune was actually in the last place in the sign-series, and was thus no. 24, not no. 1. (Something analogous to this is found when the ace in games of cards has, not the lowest, but the highest numerical value; and even in our day, the use of cards for occult ends is not unknown.)

The series of the 24 runes was composed at the end of the second century by Germanic soldiers serving in the Roman army. Their teachers in the art of alphabetical magic were the worshippers of Mithra, who at this period, when the Emperor Commodus himself was a devotee of their mysterious religion, were increasing in numbers among the Roman officials and soldiers. (Cf. Cumont's investigations.) The author believes that he can show that the names of the runes were composed with reference to the magic numbers in the Mithra cult. The first rune, ᚢ, was named "aurochs" or "bull" and was given the numerical value 1, because the bull was the first living thing created by Ahura Mazda. The second rune, ᚦ, was named "fiend" or "demon" and the third, ᚨ, "god," because in the mystic lore of Mithra (as in the mysticism of the Near East generally) 3 was held to be the heavenly number and 2 the demoniacal. The fourth rune was called "chariot" because among the worshippers of Mithra 4 was the number sacred to the quadriga, the chariot κατ' ἐξοχήν, the symbol of the four elements. Of the other runes, no. 7, ᚷ, no. 8, ᚺ, and no. 9, ᚾ, are particularly easy to explain by reference to Mithraic astrology. The ninth rune, ON

nauðr, corresponds to the Mithraic Ananke, the fate that ruled over the ninth sphere; cf. the "nine worlds" of the Edda, where *nauðr* also occurs, in the ninth of the mystical chants of *Óðinn*. Almost all the runes, from the 15th, the sun rune ᛁ, onwards, have got their names from the Mithraic month. In the Avestan-Persian month the sixteenth was the day sacred to Mithra in his capacity as mediator — *ὁ μεσίτης* as he was called. The previous day, the fifteenth, was dedicated to his companion the sun god. Through *interpretatio Germana* Mithra, the *deus invictus*, naturally became identified with the god of victory of the contemporary Germans. Rune ↑, no. 17 in the *fuþark* — that is, no. 16 according to the author's theory — is called in ON *Týr*, and is mentioned in the Edda as the "victory rune." The one preceding — no. 15 according to the explanation given — is the sun rune (ON *sól*), and the fifteenth mystical chant of *Óðinn* rang *fyr Dellings durom*, i. e. "before sunrise." The names of the runes following can also be explained more or less obviously by reference to the Avestan-Persian calendar. For the last, no. 24, ᚠ (ON *fé*), we find a corresponding symbol in the Avestan-Persian month for the meaning, and as nearly as possible for the number too. The 25th day in the Avestan-Persian month is dedicated to the goddess of riches, Ashi Vañuhi, Mithra's sister. Because it was desired to have an alphabet of no more than 24 letters, like that of the Greeks, the riches rune was assigned the twenty-fourth place and was thus characterized by the highest number in the series.

Chapter III is devoted to a discussion of the numerical magic in some of the Edda poems (*Lióðatal* and *Grógaldr*) and in OHG, AS, and ON incantations (*galdrar*). In these poems, as in a number of Scandinavian mystical formulas, some of later date,

a mathematical principle seems to have been applied, involving the counting of words.

In Chapter IV is shown how, by means of the author's reconstruction of the *upark* series, the mystical old runic inscriptions can be calculated according to the principles of gematria. For instance, ᚨᛏᚾ is 3 + 20 + 1 = 24. The numerous talismans on which this inscription — or ᛏᚾᚨ (also = 24) — is found were supposed to bring the wearer happiness or riches (ON *fé*). Many old inscriptions — those on the Bracteate of Vadstena, the Lindholm Charm, and the Golden Horn of Gallehus, for instance — are real feats of gematria. Each group of runes contains a mystical combination of numbers, and the numerical value of the whole inscription contains one also. On the Golden Horn there was a triple mystic use of the number 13: *ek hlewagastiʀ* has the numerical value 143 = 11 × 13, *holtijaʀ* the numerical value 104 = 8 × 13, and the whole inscription the numerical value 390 = 30 × 13. The decoration of the horn corresponded; in the space beneath the inscription there were 39 = 3 × 13 figures, and the horn probably at one time consisted of 13 bands of figures, as was the case with the undamaged Gallehus horn. The number 13 was especially sacred among the worshippers of Mithra and of Jupiter Dolichenus. Among the old Germans, 13 was probably regarded as the sacred number of the star god Ullr, who at one time had a prominent place in Northern mythology.

Certain Anglo-Saxon runic inscriptions of a mystical character reveal in principle the same system of alphabetical magic as the old Scandinavian runic monuments, but here one has to take into account a longer series of numerical values, 1–28

or 1–33 instead of 1–24. The scramasax from the Thames shows a gematria based on the number 17, the number of the goddess Frigg and of the rune . This number is hidden in the inscription in various ways. There is even a word there — probably a name — beginning with the 17th rune. (Cf. § 51.) The runic finger-ring from Greymoor Hill, Kingmoor, in the British Museum also shows an inscription with a complicated gematria. (Cf. § 69.)

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INDEX

OF THE MYTHOLOGICAL-MAGICAL CONTENT OF THE WORK

(Rune names italicized, numbers refer to page.)