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The front page: Amber nuggets and semi-finished amber beads and pendants from pit-house 7/91 in Biskupice, Poland.

Photo: Marcin Woźniak.

The back page: Suspension loop for gold bracteate S12625, from Hå on Jæren, Rogaland. Photo: Annette G. Øvrelid.

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Household ecology, gender and funerary rites in the 4th or 5th century AD: The evidence of the Tune inscription

JOHN HINES

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The Tune runestone is a funerary memorial, first recorded in 1627, at which date it had been incorporated into the stone wall enclosing the churchyard of the parish of Tune, near Sarpsborg in Østfold. Its earlier history has to be reconstructed, and while there is evidence that provides clues to its earliest contexts, the date at which the inscription was made is difficult to pin down. Linguistic features of the inscription and the way it has been laid out on the stone are characteristic of very early runestones from Norway, but even so it could be either of the Late Roman Iron Age or the early Migration Period. In any case, the inscription clearly documents important facets of the social and economic circumstances in which it was made. Those show how valuable it will be when scholarship and science advance to the point at which they can locate the memorial stone in a more precise historical context.

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Østfold in the Iron Age

The eastern side of the Oslofjord is not recorded as having been called Østfold, the “east land”, before the 16th century, even though Vestfold on the opposite side of the Viken inlet is explicitly recorded under that name as early as the 9th century (Pedersen et al. 2003, 387–89). Snorri Sturluson’s *Heimskringla* shows that an earlier name for the region including Østfold was *Vingulmørk* (Pedersen et al. 2003, 399–428). Old Norse *vingull* means “fescue” (*Festuca Spp.*) and *mørk* a border-territory, implying that the region was perceived as a large borderland characterized by a type of grass that is especially characteristic of good pasture for grazing livestock and haymaking for winter feed (Steinshamn et al. 2016). The name was presumably coined to denote what this region’s most important economic resource was at that time.

Topographically, Østfold is a non-mountainous region, defined primarily by three major features. The Oslofjord is geologically a rift valley, bounded by outcrops of tectonically produced granite. Of younger geological date is the glacial edge moraine known as Raet, which runs

across Scandinavia from along the south coast of Norway, across the Oslofjord and on through Sweden to Finland: a surface feature that in connexion with alluviation and isostatic sea-level change has produced considerable areas of good arable land in the region (Figure 1). Cutting through Raet just before debouching into the Oslofjord is the mighty Glomma river, draining a massive area of eastern and central Norway known as The Uplands (*Opplandene*).

Geographically within the context of Scandinavia as a whole, and chronologically in the comparably wide perspective of the last two millennia of Scandinavian prehistory (ca. 1000 BC – AD 1000), Østfold is curiously distinctive. That is not a matter of absolute uniqueness, but rather one of sharing developments in turn with different neighbouring regions while sometimes following a chronological trajectory that was peculiarly local. Through the Bronze Age and the earlier parts of the Iron Age, this eastern area of the Oslofjord tends to predominate in archaeological overviews in a way that implies it materially to have been thriving, accumulating riches and cultural

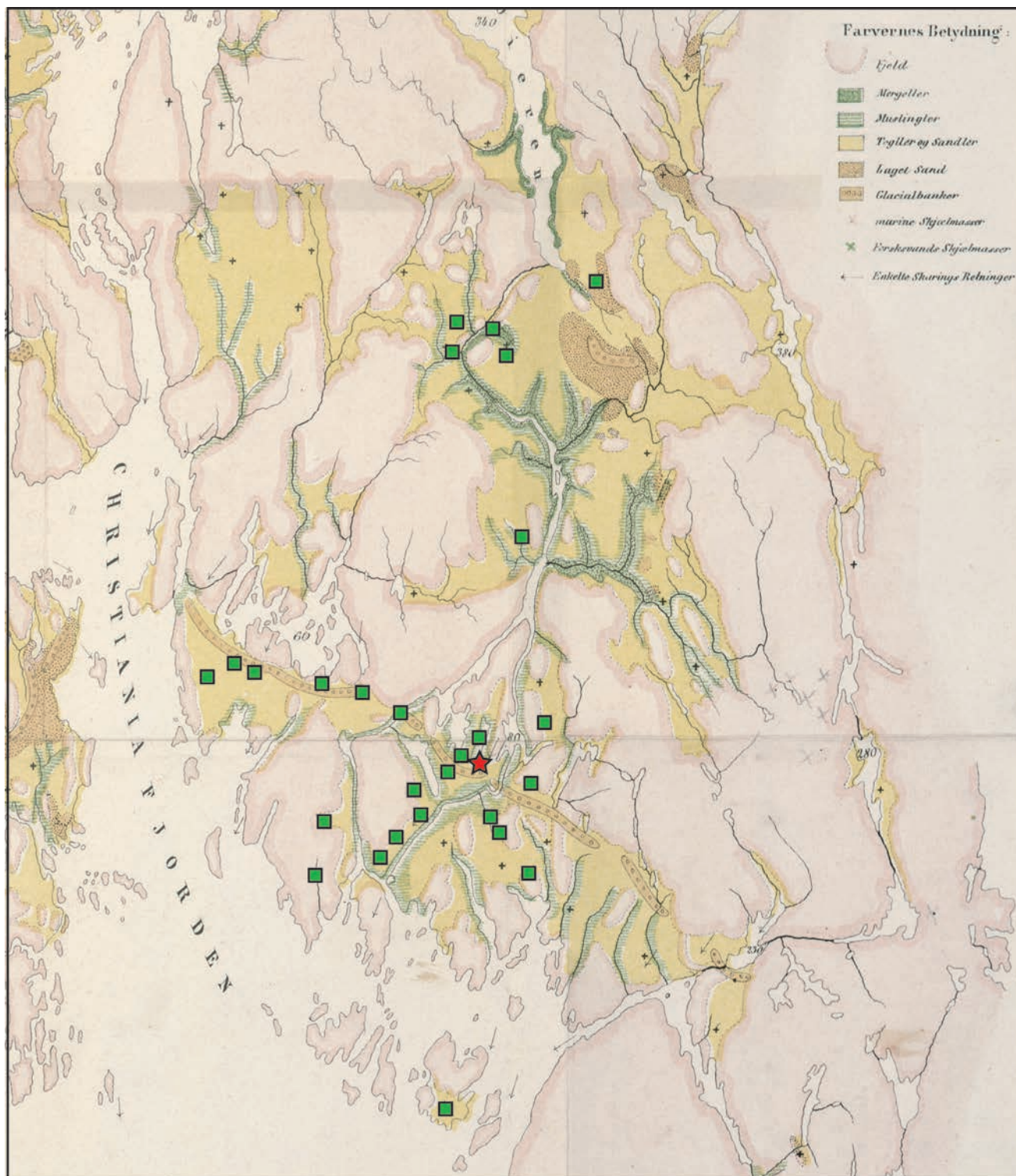


Figure 1. The Østfold area showing Raet and other glacial geological deposits mapped by Theodor Kjerulf (1859). The key reads, from the top: Fell; Marls; Shell; Brickearth and Sandy clay; Laid sand; Moraines; Marine shell; Freshwater shell; The direction of individual cuts. Red star: Tune; green squares: Iron-age settlement sites.

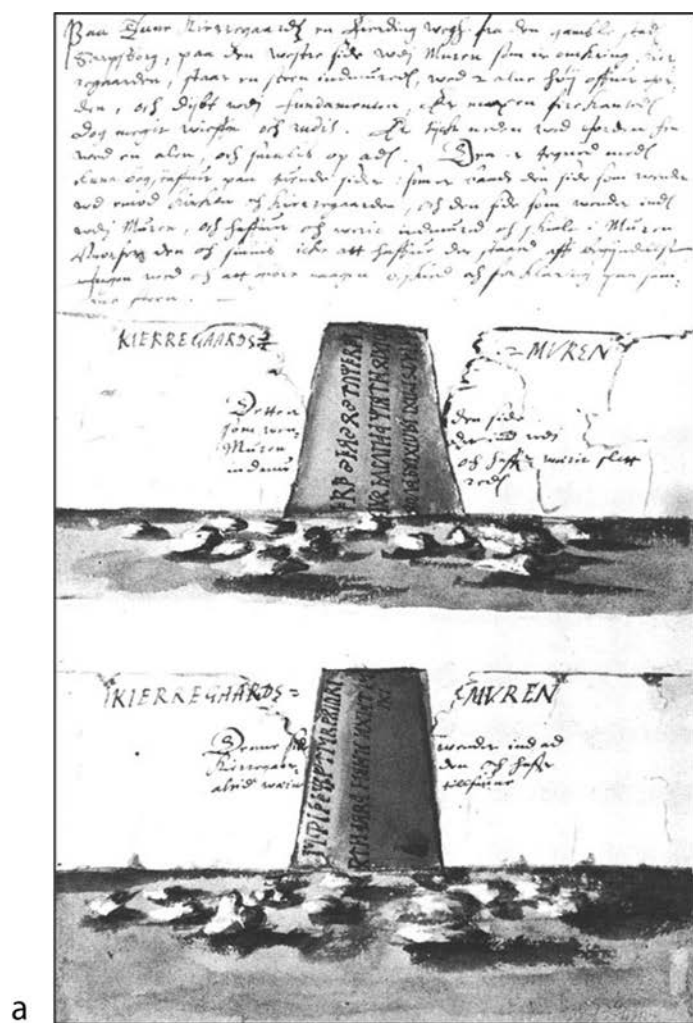


Figure 2 a. Peder Alfsson's drawing of the Tune runestone in the churchyard wall, 1627; b. A sketch plan of the old church at Tune indicating that the tower was raised over a large mound, by Ludwig Kliiwer, 1823. After Grimm and Stylegar 2017, fig. 3d.



weight. Østfold together with the neighbouring region of Bohuslän to the south, itself part of the Kingdom of Norway before being conquered and appropriated by the Swedish Crown in 1658, far outstrip any other such area in the quantity of primarily Bronze-age rock art, which itself expresses an intimate relationship with the coast and the importance of navigation (Nimura 2016, esp. 85–93; Vogt 2012). In the pre-Roman Iron Age towards the end of the first millennium BC, Østfold is practically the only part of Norway where substantial burial grounds are recorded (Solberg 2000, 40–42; Wangen 2009): typically unfurnished cremations, sometimes with cinerary urns, or overlain or ringed by placed stones.

In recent years, modern excavation and dating methods have also produced a remarkable surge in the number of identified settlement sites within Østfold, mostly from the period of the Late Bronze Age to the Migration Period, around the middle of the Scandinavian Iron Age (Gjerpe 2023). Lars Erik Gjerpe's study combines a great deal of empirical evidence with theoretical evaluations to construct a detailed and complex long-term model for the whole of the south-eastern quarter of Norway

known as Østlandet. The most salient features for the present study include, unsurprisingly, a division of the whole of this area into southern and northern halves in terms of internal consistency and mutual difference, the southern half comprising Østfold, Akershus and Vestfold. Nonetheless there are also some clear differences between the eastern and western sides of the Oslofjord, produced by architectural details such as the presence/absence of two-aisled buildings or gable posts, and predominant building-alignments, but most strikingly in respect of a much earlier introduction of site-continuity, raising successive buildings at effectively the same spot and the detectable repair and rebuilding of structures, in Østfold than anywhere else. The known Iron-age settlement sites of Østfold are found in the two separate zones with good agricultural land, one around Eidsberg in the north and the other immediately south of the Raet ridge (see Figure 1). A well-published site in the latter zone is at Missingen, not far from Tune (Bårdseth 2009; Bårdseth and Sandvik 2007; Maixner 2015). There is a clear majority of these sites in that more southerly zone, due in part to the volume of recent development in and around the

municipalities of Sarpsborg and Fredrikstad, but still direct evidence of the wealth of archaeological remains here.

Missingen is a major farm of the Roman Iron Age, of the character that is regularly labelled a “magnate” seat. The continuing display of elevated wealth and power in Østfold in the first three centuries AD is also well represented by pre-eminent cemeteries, now with some furnished graves with high-value and exclusive grave goods: the most fully studied of these are Hunn in Fredrikstad and Storedal in Skjeberg (Bøe 1927; Petersen 1916; Resi 1986; Stylegar 2008). Bergljot Solberg identified the elite graves of Roman Iron-age Østfold with a “rank-group” 3 in Lund Hansen’s scheme of territories dominated by elites with far-reaching contact networks, both across southern Scandinavia and at the highest level between Scandinavia and the Roman Empire, although there are grave-assemblages that seem rather to be characteristic of Lund Hansen’s higher Status 2-*Gräber/Zentrum vom Typ 2* (Lund Hansen 1995, 374–84; Solberg 2000, 94–96). Whichever, this implies a satellite relationship between the elite group in Østfold and the nearest supra-regional power-centre in Sjælland. But the latter group’s dominance began to wane by phase C3, the 4th century, when likewise the distinctly wealthy graves of the 3rd century and earlier in Østfold disappear. This new phase coincides with the earliest plausible horizon in which the Tune inscription was made (see the following section).

It is striking that Migration-period farmhouses in Østfold also appear fairly moderate in dimensions (Gjerpe 2023, 93–96). But the overall number of settlements remains steady; there is nothing to imply a dramatic social and economic collapse leading up and into the Migration Period here (Loftsgarden and Solheim 2023; Ødegaard et al. 2023). Ingunn M. Røstad’s analyses of Norway focussed on the Migration Period consistently reveal the emergence of centres of innovation and gravity away from Østfold, which sits rather on the edge of distributional ranges (Røstad 2021, 77–215). And yet there are still special finds, particularly in the northern agrarian zone, such as the cremation in a Vestland cauldron also containing four Bliv wrist-clasps at Østby in Rakkestad (Dahlin Hauken 2005, 75 and pl. Ia), and the unique, apparently imitative, glass vessel deposited in an inhumation grave along with a gold ring at Langset in Trøgstad (Straume 2011, 424 and Taf. 1.1–3), both of the 5th century; and from around the middle of the 6th century the exceptional gold hoard found at Sletner, Eidsberg (Bøe 1922, 7–11). The contrast in character between the southern and northern farming zones of Østfold in the Migration Period merits more detailed investigation, but that is not a task for the present context; nor do we need

to do more than note a further change of direction and orientation for Østfold in the following Merovingian Period (late 6th–8th centuries) (Røstad 2021, 215–46).

The name of Tune parish is eponymous with the first of the great Norwegian Viking ship-graves excavated, the Tune-ship (the burial chamber dendro-dated AD 905–910: Bonde and Christensen 1993); not quite at the same site as the church and runestone but a few kilometres away at the farm of Nedre Haugen, where not only was the presence of the barrow emphasized by the farm-name (*haugen* = “the burial mound”) but local traditions of “the ship-mound” (*båthaugen*) credibly show unbroken local memory from the 10th century (Schetelig 1917). There is no doubt, then, of the long-term focal importance of the Tune district. The parish-name itself, from the plural genitive and dative forms *túna* and *tínnum* (“of, to or at the townships”), is one that consistently represents major Iron-age estate centres, usually royal, and must also have been created by the 10th century. Other names in the district point to further secular and religious communal fora: Lekevoll, Tingvoll, Vesten, reflexes of standardized Old Norse *leika-vøllr*, *þing-vøllr* and *vé-steinn* (“games-field”, “assembly-field” and “shrine-rock”) (Vikstrand 2023: note Vikstrand’s relatively sceptical assessment of other suggested ancient “sacral” place-names in the vicinity). Thus whatever its precise chronological context, the Tune runestone represents one of many stages in the evolution and continual reconstruction of a major social centre in a firmly rooted and well-sustained agrarian and maritime zone.

The Tune runestone: dating

Tune church is now on the edge of the city of Sarpsborg, towards the south of Østfold. The church was rebuilt in the 1860s, but earlier records show that the tower of its medieval predecessor had been located over a major barrow, close to where the runestone was incorporated into the churchyard wall (Figure 2; Grimm and Stylegar 2017). From the end of the 1860s there is a hair-raising account published by Anders Lorange of whistle-stop excavations entrusted to a student in his very early twenties in the context of the widespread destruction of archaeological monuments for farming. This report includes a description of the area around Tune, seen one winter, as being occupied by “an innumerable quantity of ancient monuments” including hundreds of barrows, cairns, stone-settings, standing stones and rock-carvings, “not yet,” he poignantly noted, “reached by the plough” (Lorange 1869, 82: translated; cf. Grimm and Stylegar 2017, fig. 3c). Nearly all of this has since disappeared. Archaeologically recovered grave finds from sites around Tune



Figure 3. The Tune runestone. a. Engraving by Ludwig Wimmer published in Bugge 1891. b. Photographs from the Runische Schriftlichkeit database (www2). Left: Side A; Right: Side B.

are dominated by finds of the Merovingian and Viking Periods of the 7th to 10th centuries AD, not of the period of the runic inscription (Pedersen et al. 2003, 304–7, 320–24 and 338–45).

The date of the Tune stone has to be determined, as best we can, between the disciplines of Comparative Philology and Archaeology. The former is a long-established branch of historical linguistics through which prehistoric phases of development within language can be reconstructed,

primarily with reference to sequenced sound-changes in the phonological system. This allows us to place runic inscriptions in a relative-chronological order. That perspective can be combined with artefactual and contextual archaeological evidence to identify, amongst other things, an early Norwegian runestone phase around the 3rd to 5th centuries AD (Spurkland 2005, 20–45; see below on a possibly even earlier inscribed stone from Svingerud, Hole, Buskerud). A runestone that is an inscribed natural boulder from Stenstad, Gjerpen, Telemark, is directly associable with female grave goods — a cruciform brooch, a wooden bucket and sherds of a bucket-shaped pot — that date the burial to around the middle of the 5th century (Undset 1878, 16–20). Its inscription **igijonhalaz** may be translated as “Ingijō’s stone”, and Ingijō is a feminine name. This inscription also has a linguistic detail that is matched in the Tune inscription, the preservation of the second *a* in the noun **halaz** (technically, the “thematic” vowel of the inflectional endings), which places these texts in the “pre-Syncope” phase (Nielsen 2000, 77–79, 84–105; Seip 1955, 19–27). At least a dozen, possibly twenty, further runestones from Norway and a few from Sweden are of similar age (Palm 1992, 69–70). On the whole the implementation of syncope seems to be a feature of the Merovingian Period in Norway, but there are some slightly earlier signs of the process, of which a particularly relevant example is on the mid-6th-century tiny Eikeland (Rogaland) relief brooch, where **wiz** is plausibly identified as a reduced form of the personal name **wiwaz** of Tune (Nielsen 2000, 259 and n.34; Spurkland 2005, 25–27). More useful, though, for a precise relative chronology of the Tune inscription is to compare and contrast its verb **worahto** (1st person singular, “made”) with **wurte** and **orte** (3rd pers. sg., “made”) on a C-bracteate from Tjurkö, Karlskrona k., Blekinge, Sweden, datable around the turn of the 5th to the 6th century, and a runestone from By, Sigdal, Buskerud, respectively. The Tune inscription retains the consonant cluster **-rht-** in this verb, leading to the insertion of a so-called *svarabhakti* or parasite vowel *a*, while the latter two have dropped the *h* (Seip 1955, 28), and By further appears to show the later dropping of initial *w-* before back vowels characteristic of proto-Old Norse (whence *orð*, *ord* vs. *word*; *Óðinn* vs. *Wotan*; *úlfr*, *ulv* vs. *wolf*, etc.) (Nielsen 2000, 257 and 264–65: note that the By runestone is damaged, and its limited legibility creates important uncertainties).

There are parallels in the layout of several of these texts too, not least a strong tendency to have vertical lines of text on the early runestones (Figure 3). But it is the linguistic criteria from which we can infer that the Tune stone should be no later than the 5th century. Spurkland

(2005, 35–42) assigned it to the 5th century, which is the earlier Migration Period. But the discovery of redeposited broken runestone fragments in a cremation cemetery context radiocarbon-dated between the 1st and the mid-3rd century AD at Hole, north of the Tyrifjord (Solheim et al. 2025; Zilmer and Vasshus 2023), means that it could well date from the Late Roman Iron Age and be 4th- or even 3rd-century. Hans Frede Nielsen (2000, 279–87) was comfortable with a dating of the Tune inscription within the 200-year bracket of ca. AD 250–450, and that is both sound, and as good as we can currently achieve.

The Tune inscription: interpretation

The inscription is in five lines, two and three respectively on opposite faces of the stone (Sides A and B: Figure 3). The inscription is nicely legible on the whole, although a small part of the inscribed surface has flaked off, frustratingly removing the beginning of the first line on Side B, and it is likely that the top of the stone has also broken off, removing the end of line A2 (Knirk 2011). Peder Alfsson's sketch of 1627 (Figure 2a) shows line B1 as complete, with four runes before what is identifiable with what still remains. But what he has drawn there makes no sense, and indicates a short runic sequence going in the opposite direction and upside-down compared with the remainder of the line. It seems that he imaginatively “restored” the missing section here. There is complete and entirely reliable consensus over the order in which the sides and lines are to be read. A critical factor behind the layout of the text is that it contains two discrete sentences: the first Side A lines 1–2 and Side B line 1; the second Side B lines 2–3. The layout of the text is essentially boustrophedon: the successive lines of the first sentence on Side A and those of the second sentence on Side B are to be read in opposite directions, left-to-right or right-to-left. In the vertical lines of text, the top of the runes is to the right in the first sentence but to the left in the second sentence.



Figure 4. The apparent rune **z** at the beginning of the surviving portion of line B1 (arrowed): screenshot from *www1*.

Transliterations of runes are conventionally given in bold, with the diacritic \sim marking a “bind-rune” (consecutive runes ligatured) and square brackets definite lacunae in the text. All three of the bind-runes in this inscription involve the rune **a** conjoined with a preceding rune which has a full vertical stave at the edge preceding it. In the following, largely undisputed, transliteration of the inscription, the five short dashes at the start of line B1 represent the bases of five vertical staves that are still visible — four of them very clearly; a fifth, however, vestigial at best.

A1 **ekwiwazafter·woduri**
 A2 **dewitadāhālaiban:worahto·[**
 B1 **-----]z:woduride:staina:**
 B2 **prijozdohtrizdalidun**
 B3 **arbijasijostezarbijano**

Turned into an edited version with word division, this can be given as the following two sentences:

Ek Wiwaz after Woduride witandahalaiban worahto —z Woduride staina.

Prijoz dohtriz dalidun arbija, sijostez arbijano.

The insertion of an *n* before **da** in **witadā** (A2) is fully consistent with a regular runic practice of omitting nasal consonants at the beginning of consonant clusters, and gives good lexical sense, as we shall see. Notwithstanding a more recent thorough reinterpretation by Thórhallur Eythórsson (2012), which is particularly strong as an overview of earlier proposals, in practical terms the most efficient way of summarizing the argument from this point onwards appears to me to be to refer to Terje Spurkland's English version of his preferred interpretation of the text (Spurkland 2005, 35–42), which divides what I have described as the single first sentence into two. Spurkland followed the painstaking study of Ottar Grønvik (1981) closely:

I, Wiwaz, in memory of Woduridaz the master of the household, made [these runes]. [I entrusted] to Woduridaz the stone.

Three daughters arranged the funeral feast, the dearest/most devoted/most divine of heirs.

To reconstruct the first sentence of Spurkland's reading, virtually all scholars from Sophus Bugge (1891, 1–44) onwards have postulated that a direct object to the verb **worahto**, very probably the noun “runes” (***runoz**), must have been in a section that has broken off at the end of

line A2. It appears likely but not certain that the top of a rune stave following the final o of *worahto* can be seen here. But otherwise all of the lines of text respect the top of the stone as it is now, and all of them end with complete words; grammatically, as we shall see, there is no need to emend the text in that way. Spurkland then followed Grønvik (1981, 168–75) in creating a conjoined clause to occupy line 1 of Side B by introducing a new finite verb in the lost section at the beginning of that line – postulating *falh*, “entrusted”. However the rune *z* at the end of this line-initial sequence, read by Wimmer and Bugge in the 19th century, is still tolerably clear (Figure 4; see also www1).¹ These three lines are linked by the persistent alliteration of stressed words starting with *w*: **wiwaz**, **woduride**, **witadahalaiban**, **worahto**, **woduride**. In a further discussion published in 1903 as “Corrections and Additions” to his 1891 edition, Bugge (1903, 510–23, esp. 517–23) revised the interpretation he had previously proposed, namely that Side B had been added to the stone later. He now foregrounded the case for reading lines A1–A2 and B1 as one sentence, albeit with two main clauses and still conjecturing a lost second main verb. Although not explained very clearly, his implied position seems to be that **after** in A1 is identified as the preposition “after”, and the word ***aftez** hypothesized for the beginning of B1 the adverb, Old Norse *aftr*, *aptr*, supposedly with a sense of “afterwards”, modifying the second main verb concurrently hypothesized for the end of A2. **woduride** in B1 is then an indirect object marked by the dative case: *I, Wiwaz, made [runes] after Woduridaz...; [and raised afterwards] for Woduridaz a stone*.

Without conjecturing quite substantial lost segments, however, the first three lines as they stand, with their consistent alliteration, have the structure of a perfect simple sentence: subject (*I, Wiwaz*: pronoun and personal name, nominative singular) – transitive verb (*made*: first person singular preterite) – direct object (*stone*: accusative singular). In between, *Woduridaz* is named twice, with the name in the dative case on both occasions. One could imagine that was done for the honorand’s name to appear on both sides of the stone. However a key assumption determining *all* reconstructions from Per A. Munch (1857) onwards has been that the phrase *after Woduride witadahalaiban* is a standard memorial formula: “after/in memory of this person” (overview in Grønvik 1981, 79–122). This, however, attributes to a Late Roman Iron-age or early Migration-period inscription what are in reality the formulaic conventions of 9th-century and later, Viking-period parallels; the solitary earlier occurrence of the preposition “after” with a personal name in Scandinavia is on the Istaby stone from the small and curiously

discrete Blekinge runestone group datable around the beginning of the 7th century (Birkmann 1995, 114–42). In all of these later cases, moreover, the preposition “after” governs the accusative case, not the dative. In literary Old Norse from several centuries later, *eptir* with the dative case specifically indicates a temporal sequence: “following after.” As this semantic detail can be traced in all of the early Germanic languages, one may infer that it should apply to the Tune inscription as well.

Profoundly significant in the adverbial phrase beginning *after Woduride* is the compound noun written **witadahalaiban**. The now-accepted analysis and interpretation of this as a present participle *witand-*, “watching, knowing”, and the noun *hlaifa-*, “loaf, bread”, was proposed by Otto von Friesen in 1900. Bugge (1903, 511–12) rapidly acknowledged this to be “insightful and appealing” but rejected it because of the lack of appropriate structural parallels in the lexicon, and because – for reasons I struggle to comprehend – he regarded it as an inappropriate term to signify “master of the household”. Semantically if not structurally, it is markedly close to the Old English pair *hlaford* and *hlafdige*, modern “lord” and “lady”, from **hlāf-weard* and **hlāf-dige*, “loaf-guardian” and “loaf-kneader”. Carl Marstrand (1930, 333–35) definitively endorsed von Friesen’s proposal, however, and it has retained consensus acceptance status since then.

Be it as a grandiose creative image or a technical social term of its age, if **witadahalaiban** is in direct apposition to the name **woduride** that directly precedes it, it must be inflected in the dative singular. Germanic **hlaifaz*, however, would there have the same *-e* ending as **woduride**. The present participle conversely *would* regularly have *-an* in the masculine dative singular (Syrett 1994, 137–41 and 233–36), so the form on the Tune stone could be explained through this compound carrying the morphology of its first element, the participle, rather than of the second, the noun that participle governs, as its inflected ending (Thórhallur Eythórsson 2012, 10). If so, the **a** between **witad** and **halaiban** can simply be viewed as a compositional, linking vowel, which appears unexceptionable as a hypothesis but was regarded as reductive by Martin Syrett (1994, 235–36).

Nielsen (2000, 174) emphasized the unusual verb-object order of the elements in this compound, and many scholars have stressed the extent to which element-order in this inscription is adapted to an alliterative and rhythmical prosody that could motivate the placement of *witanda* at the beginning of the word (Marold 2012, esp. 75–78; Schulte 2023). Von Friesen (1900) and Syrett (1994, 233) noted a few similar compounds in later Norse literature (cf. Carr 1939, 170–74), but those are occasional

hapax legomena and typically flippant and scurrilous epithet-nicknames, inflected and used as weak (“definite”) adjectives: e.g. *kastanrassi*, “blasting-arse”; *hengjankjap-ta*, “hanging-jaw”. Old English literature frequently uses compounds of noun + present participle, albeit in that order: e.g. *brimliðend*, *healsittend*, *randhæbbend*, “seafaring”, “hall-sitting”, “shield-holding”. In these cases it is always the participle, the second element, that inflects according to sentence syntax. Together with a handful of Vedic Sanskrit and Greek comparanda these demonstrate that this structure was well-rooted as a mode of word-formation in these languages (Burrow 1973, 216), but not that **witadahalaiban** represents an ancient and persistent Indo-European lexical type to be parsed according to pre-determined rules.

A realistic although not unproblematic possibility is to see **witadā** as the masculine nominative singular to be read in apposition to the immediately preceding masculine nominative singular personal name **wiwaz**. What might be problematic in that case is explaining why the root **hlaifa-* (never a common lexeme in recorded Old Norse) should still be inflected as the oblique form (i.e. accusative, genitive or dative singular) of an *n*-stem or “weak” noun when subordinate to this verbal element. There is an *n*-stem noun derived from **hlaifaz* found in the Gothic and Old High German *gahlaiba/gileipo*: etymologically “messmate”, but used in the sense of “companion”, “colleague”. This is the lexeme that Bugge continued to believe was the most likely explanation of **halaiban**, although he recognized the problem of the elusive prefix *ga-/gi-* (Bugge 1891, 16–19, 1903, 511–12). In an Ostrogothic Italian charter of the mid-6th century written in Latin and Gothic, practically the same word also occurs in the dative plural in the phrase *mip gehlaibaim unsaraim*, “with our fellows”, in this case in a variant inflected according to the paradigm of an *a*-stem adjective used substantively (Werde ed. 1913, 277–79). It is speculative to suggest that **witadahalaiban** is inflected in agreement with **wiwaz** in the Tune inscription, i.e. with first lexical element of the compound also masculine nominative singular, but not a matter of special pleading contrary to all philological propriety. It attributes definite meaning to the final **a** of **witadā** to interpret what was said (here in a clearer Modern English word-order) as: *I Wiwaz, loaf-master after Woduridaz, made [for] Woduridaz [the] stone*. Moreover this nicely resolves the enigma of why Woduridaz is named twice in close succession, without massive emendatory supplementation to produce separate clauses.

Lines B2 and B3 contain another sentence, with a variant structure, starting with a subject noun phrase **prijoz**

dohtriz, “three daughters”, a preterite verb inflected in the plural **dalidun**, which can be interpreted as something close to “made perfect”, and a direct object noun **arbija**, “the funeralia”. The final two words say something more about these three daughters as subject, with an adjective in the nominative plural **sijostez**, or some suggest **asijos-tez**, and a noun in the genitive plural linked to it, **arbijano**. Here, it is what the words are and what they mean which is the challenge. **prijoz dohtriz** is unproblematic, and so largely is **arbija**, which is identifiable with the Old Norse neuter *a*-stem noun *erfi*, defined by Richard Cleasby and Guðbrandur Vigfússon (rev. ed. 1957) as “a wake, funeral feast”. The complexity of what actually those rites could comprise is of course something archaeologists have long emphasized. The verb **dalidun** appears to be derived from the adjective that has the form *dæll* in Old Norse, *deall* in Old English, which means “proper”, “fitting”, and so would indicate “they did it all properly”, “they made it fitting”. Spurkland’s English translation “arranged” perhaps does not quite convey a sufficient sense of approval and commendation (in Norwegian he translated this just as *forberedte*, “prepared”). Grønvik’s *gjorde...hyggelig*, “made things nice”, is surely too light (Grønvik 1981, 180–81; Spurkland 2001, 50, 2005, 39–40). Thórhallur Eythórs-son (2012, 14–18) prefers to emend the verb to *dailidun*, “shared” and interprets the verb phrase with **arbija** as “shared the inheritance”. That makes plausible sense in the context, albeit prosaically. Reasons for demurring at this proposal are the emendation of the verb, presupposing the omission of the letter *i* from a diphthong that is correctly represented in **halaiban** and **staina**, and interpreting **arbija** as “inheritance”, for which the regular Old Norse noun was *erfð*: from the same root, but a feminine noun of a relatively common type with a dental consonantal suffix.

dohtriz and **dalidun** alliterate on *d-*; after that **arbija** and **arbijano** not only alliterate on *a-* but show effective word-play, taking the same root *arbij-* in different senses marked by different inflectional paradigms. In respect of **arbija**, it is unfortunate that a standard term for funeral rites in Norwegian is *gravøl*, literally “grave-ale”, because **arbija**, which Spurkland translated as “funeral feast”, contains no explicit reference to food and drink. On the final word, the inflectional ending **-ano** shows we have an *n*-stem noun, which Spurkland translated as “the heirs”, *arvingene*, although Grønvik argued insistently that it should only be understood as *de etterlatte*, “those left behind/still living” (Grønvik 1981, 176–84; cf. Spurkland 2001, 50, 2005, 39–40). Indo-European evidence for the original sense of the term, in particular the Greek cognate *orphanós*, “the surviving child of deceased parents”, offers significant support for Grønvik’s position. The

recorded words for “heir” in Old Norse and Old English, *erfingi* and *erfeweard* respectively, show the creation of further derivatives of this root to meet that need. Conversely, Spurkland’s translation is supported by parallel *n*-stem nouns in Gothic and Old High German, of which the very similar Gothic *arbja* (masc.) and *arbjō* (fem.) are chronologically most relevant. In the Gothic New Testament these are used unambiguously, usually with the verb *wairþan*, “to become”, to translate forms of the biblical Greek verb *klēronoméō*: “to take an allotted share of something” (masc. nom. sg. in Mark 10, 17; Luke 10, 25; masc. acc. pl. Galatians 3, 39 and 5, 21; fem. nom. sg. in I Corinthians 15, 50). Grønvik was nonetheless justified in arguing that to translate the term as “heirs” without relevant notes risks importing later ideas of property and inheritance, such as *oðal*-right. “Successor” is etymologically sounder and more judicious in its implications.

What stands in between these two words is perhaps the most argued-over segment. Bugge suggested that **sijostez** was a slip for **sibjostez**, with **sibjostez arbijano** meaning “the nearest surviving kin”: Old Norse *sif* is a feminine noun meaning “kinship” (Bugge 1891, 30–35). Thórhallur Eythórsson has suggested an interpretation of **sijostez** that gives exactly the same meaning but with a different, very elaborately constructed, etymology (Thórhallur Eythórsson 2012, 18–19, 21–26, 2013; Mees 2013). In 1930, conversely, Marstrander had introduced the idea that the **a** at the end of **arbija** could also be read as an **a** at the start of a word **asijostez** (Marstrander 1930, 315–21). As orthographic practice that is plausible for a runic inscription, and it would give us three words alliterating on *a*-. He suggested this word referred to the *áss*, “god”, and meant “most divine”. In what sense these three daughters might be “most divine” or “godlike” we should have to imagine, and also how they could have that quality without anything of the sort being noted in respect of Woduridaz, implicitly their father. A linguistic problem with this proposition is that the suggested second *a*, the initial vowel of **ans*-, should be nasalized and so qualitatively different from the *a* at the end of *arbija*. Moreover **ans*- is a root that has a feminine derivative formed with the Germanic suffix **-unijō*, giving Old Norse *ásynja*, and formally likely to be a term of great antiquity. Why would that not appear in referring to the three women (although see immediately below on the apparently masculine ending **-ez**)? The eddic poem *Fafnismál* had to use or coin a different adjective meaning “*áss*-descended/of *áss*-kin” in presenting the heterogeneous descent of the Norns, at the end of an introductory section to the poem in which genealogy and fate are the dominant theme:

*Sumar ero áskungar
sumar álfkungar,
sumar dœtr Dvalins.*

“Some are of áss-kin, some of elf-kin,
some daughters of Dvalinn [= of dwarf-kin]”

(*Fafnismál* st. 13: Neckel/Kühn ed. 1962, 182. Note that the verse is also quoted in Snorri’s *Gylfaginning*, and the principal manuscripts of that text show some uncertainty over the adjective, implying its unfamiliarity.)

Those are problems, although perhaps not conclusive reasons to dismiss Marstrander’s suggestion. We can, though, reject Grønvik’s idea of an otherwise unattested adjective *āsija*- (“loving”/“beloved”) related to the noun *ást* and hence “the loveliest, or most loving, of descended” (Grønvik 1981, 180–4). That is a made-up word, with no explanation for the absence of the otherwise consistent *t* from the root. Evidence for the alleged occurrence of a related word on the Eikeland brooch is highly problematic: there, a clearly intelligible sentence *I, Wiz, for Wiwja, inscribe runes* is followed by four further runes **a s n** and **i**. Of those, **a** continues on naturally from **runoz** but the **s** and particularly the **n** are reversed from how they usually appear, and one would normally read the final three graphs as a retrograde sequence **ins**. Reading *asni* here is possible, but then claiming that it means “to the beloved” is pure guesswork.² Bugge’s suggestion that **sijostez** is a misspelling for **sibjostez** is also conjectural, but it is no worse and arguably a better conjecture than any proposed alternative. In the “Ur-Nordic” language and its runic inscriptions, the sequence **ij** occurs very frequently, and that could explain why the inscriber cut a familiar sequence of graphs and missed out the spirant **b** that should have stood between these runes. However we interpret the word, a curious point is that the inflectional ending **-ez** is what we would expect of the masculine gender, rather than feminine **-az**. That can be explained through *arbija* being grammatically a masculine noun irrespective of which sex it refers to. The Gothic feminine *arbjō* occurs just once, in a figurative construction in apposition to the feminine abstract noun *riurei*, “ruination, corruption/corruptibility”, itself translating the Greek feminine *phthorá*. This is no evidence for a general Germanic distribution of masculine and feminine variants of that noun.

An overview

The Tune inscription is written in an ancient pre-Norse form of the language of Scandinavia and is incomplete. All suggested interpretations of it must involve conjectures. In English translation, the new suggestion made here can be put as:

I, Wiwaz, loaf-master after Woduridaz, made [—] for Woduridaz a stone.

Three daughters provided fitting funeralia, the nearest in kin of the successors.

This has been carefully assessed, and may be claimed both to be valid and to have some real strengths in respect of specific problems.

However poetic in its alliterative style the Tune inscription is, **witadahalaiban**, “loaf-master”, was not just an artistic epithet for Woduridaz but denoted a position which Wiwaz succeeded to after him. That is the only relationship between these two men declared, though something may have been added in the short lost section between the end of A2 and at the start of B1. Spurkland (2005, 41–42) inferred that Wiwaz must be Woduridaz’s paternal grandson — so the three daughters would be his aunts (cf. also Grønvik 1994). Maybe. But why not a husband of one of the daughters? Or a guardian to whom the daughters became wards — which would imply none of them had a living husband? All of these are *possible*. In a patrilineal and androcentric society, for a man to die leaving only daughters creates particular opportunities for a redistribution of positions of power.

As Grethe Bukkemoen has discussed, the concept of the loaf-keeper foregrounds the significance of bread, which a range of archaeological evidence, especially the development and distribution of rotary querns, shows to have made a breakthrough as a key foodstuff across Norway and Sweden from the 2nd and 3rd centuries AD onwards (Bergström 2007; Bukkemoen 2021; cf. Hansson 1996; Dahlin Hauken 2018; Zachrisson 2014). The Tune runestone, which might be as late as the 5th century, marks that transformation as a completed change not a change in progress. This is no less significant evidence for emphasizing the outcome of this development. Meanwhile, making the reasonable assumption that proper funeralia without some element of communal sharing of food and drink are virtually inconceivable, the sequencing of the compound noun *witanda-halaiban* and the phrase *prijoz dohtriz dalidun arbija* may perfectly capture and reflect the emphasis on the *serving* of food as a cultural practice confirming social cohesion in the Late Roman Iron Age and Migration Period that Bukkemoen identified, contrasted with the foregrounding of food *preparation* in the Merovingian and Viking Periods (Bukkemoen 2021, 169–200; *contra* Thórhallur Eythórsson 2013, 16).

The language of the Tune inscription was able to describe (and promote) a well-ordered culture with regular succession in human and community life. But the chances of life can always mean that situations are neither

predictable nor simple. Relationships and practices then have to be adapted to fix matters. Røstad’s study shows how, towards the end of the Migration Period, Østfold was drawn back into southern Norwegian cultural zones, which implies a shared sense of identity and eventually some political assimilation as well (Røstad 2021, esp. 262–77; cf. Gudesen 1980, esp. 129–40). Her focus on women’s dress-accessories allowed her to postulate exogamy as one of the practical means of achieving this within and between the territories involved. The scenario depicted by the Tune runestone as reconstructed here is one in which men could grasp opportunities to move into existing households too. What Wiwaz did on the Tune runestone was to describe a situation that appears highly conventional, and was portrayed as a story of continuity. But he did so to show that he was now the top man.

Bibliography

- Bergström, Liselotte. 2007. *Gräddat: Brödkultur under järnåldern i östra Mälardalen*. Stockholm: Stockholm University.
- Birkmann, Thomas. 1995. *Vom Ågedal bis Malt: Die skandinavischen Runeninschriften vom Ende des 5. bis Ende des 9. Jahrhunderts*. Berlin: De Gruyter.
- Bonde, Niels and Arne Emil Christensen. 1993. “Dendrochronological dating of the Viking Age ship burials at Oseberg, Gokstad and Tune, Norway.” *Antiquity* 67: 575–83.
- Bugge, Sophus. 1891. *Norges Indskrifter med de Ældre Runer*, I. Christiania: Kildeskriftfondet.
- Bugge, Sophus. 1903. *Norges Indskrifter indtil Reformationen, første Afdeling*. Christiania: Kildeskriftfondet.
- Bukkemoen, Grethe. 2021. *An Archaeology of Commensal Spaces: Crafts, culinary practice and the household in the transition from the Early to the Late Iron Age in Norway*. PhD thesis, University of Oslo.
- Burrow, Thomas. 1973. *The Sanskrit Language*. 3rd ed. London: Faber and Faber.
- Bøe, Johannes. 1922. *Norske Guldfund fra Folkevandringstiden*. Bergens Museums Aarbok 1920–21: 1–73.
- Bøe, Johannes. 1927. *Norsk Gravguld fra Ældre Jernalder*. Bergens Museums Aarbok 1926: 1–104.
- Bårdseth, Gro Anita. 2009. “The Roman Age hall and the warrior-aristocracy: reflections upon the hall at Missingen, south-east Norway.” *Norwegian Archaeological Review* 42: 146–58.
- Bårdseth, Gro Anita and Paula Utigard Sandvik. 2007. “Missingen: ein storgard frå romartid (lokalitet 4 og 5).” In *Hus, Gard og Graver langs E6 i Sarpsborg Kommune*, edited by Gro Anita Bårdseth, 71–90. Oslo: Kulturhistorisk museum.
- Carr, Charles T. 1939. *Nominal Compounds in Germanic*. Oxford: Oxford University Press.

- Cleasby, Richard and Guðbrandur Vigfusson. 1957. *An Icelandic-English Dictionary*. Rev. ed. Oxford: Clarendon Press.
- Dahlin Hauken, Åsa. 2005. *The Westland Cauldrons in Norway*. Stavanger: Arkeologisk museum i Stavanger.
- Dahlin Hauken, Åsa. 2018. "Introduksjonen av dreiekravene i Sørvest Norge." *Viking* 81: 15–34.
- Friesen, Otto von. 1900. "Till tolkningen av Tune-stenen." *Arkiv för nordisk filologi Ny föjld* 12: 191–200.
- Gjerpe, Lars Erik. 2023. *Effective Houses: Property Rights and Settlement in Iron-age Eastern Norway*. Oslo: Cappelen Damm Akademisk.
- Grimm, Oliver and Frans-Arne Stylegar. 2017. "Norwegian runestones with inscriptions in the older futhark: a socio-topographical sketch from an archaeological point of view." In *Die Faszination des Verborgenen und seine Entschlüsselung: Rāði sar kunni*, edited by Jana Krüger, Vivian Busch, Katharina Seidel, Christiane Zimmermann and Ute Zimmermann, 121–45. Berlin: De Gruyter.
- Grønvik, Ottar. 1981. *Runene på Tunestenen: Alfabet, Språkform, Budskap*. Oslo: Universitetsforlaget.
- Grønvik, Ottar. 1992. "Runestenen fra Malt i Jylland." *Arkiv för Nordisk Filologi* 107: 1–34.
- Grønvik, Ottar. 1994. "Kan de gamle runinnskriftene fortelle oss noe om begravelser og om kontakten med de døde i førkristen tid i Norden?" In *Myte og Ritual i den førkristne Tid i Norden: Et Symposium*, edited by Jan-Peder Schjødt, 41–62. Odense: Odense Universitetsforlag.
- Grønvik, Ottar. 1998. "Enda en gang om Tuneinnskriften." *Maal og Minne* 1998 Hefte 1: 35–40.
- Gudesen, Hans Gude. 1980. *Merovingertiden i Øst-Norge: Kronologi, Kulturmønstre og Tradisjonsforløp*. Oslo: Universitetets Oldsaksamling.
- Hansson, Ann-Marie. 1996. "Bread in Birka and on Björkö." *Laborativ Arkeologi* 9: 61–78.
- Heltoft, Lars. 2017. "Maltstenens tekst: hvordan dæmonen uddrives." *Danske Studier* 2017, 27–100.
- Knirk, James. 2011. "En steinhoggerundersøkelse av Tune-stenen fra 1949." In *Festskrift til Ottar Grønvik*, edited by Jon O. Askedal, Harald Bjorvand and Einar F. Halvorsen, 102–9. Oslo: Universitetsforlaget.
- Loftsgarden, Kjetil and Steinar Solheim. 2023. "Uncovering population dynamics in southeast Norway from 1300 BC to AD 800 using summed radiocarbon probability distributions." In *Complexity and Dynamics: Settlement and Landscape from the Bronze Age to the Renaissance in the Nordic Countries (1700 BC–AD 1600)*, edited by Marie Ødegaard and Ingrid Ystgaard, 99–112. Leiden: Sidestone Press.
- Lorange, Anders. 1869. "Student A. Lorange's Udsigt over hans antikvariske Virksomhed i 1868." *Foreningen til norske Fortidsmindesmerkers Bevaring, Årsberetning* (1869), 39–84.
- Lund Hansen, Ulla. 1995. *Himlingøje–Seeland–Europa: Ein Gräberfeld der jüngeren römischen Kaiserzeit auf Seeland, seine Bedeutung und internationalen Beziehungen*. Copenhagen: Kongelige Nordiske Oldskriftselskab.
- Maixner, Birgit. 2015. "Missingen/Åkerberg i Østfold — en storgård fra jernalderen med tilknyttet håndverkssenter." *Fornvånnen* 2015: 27–42.
- Marold, Edith. 2012. "Vers oder nicht Vers? Zum metrischen Charakter von Runeninschriften im älteren Futhark." *Futhark: International Journal of Runic Studies* 2 (2011): 63–102.
- Marstrander, Carl J.S. 1930. "Tunestenen." *Norsk Tidsskrift for Sprogvidenskab* 4: 294–358.
- Mees, Bernard. 2013. "The Tune memorial's *asijostez*." *Futhark: International Journal of Runic Studies* 4: 187–90.
- Munch, Per A. 1857. "Tunestenen." *Foreningen til norske Fortidsmindesmerkers Bevaring, Årsberetning* 1856: 72–80.
- Neckel, Gustaf (ed.) rev. Hans Kühn. 1962. *Edda: Die Lieder des Codex Regius nebst verwandten Denkmälern. I: Text*. Heidelberg: Universitätsverlag Carl Winter.
- Nielsen, Hans Frede. 2000. *The Early Runic Language of Scandinavia*. Heidelberg: Universitätsverlag Carl Winter.
- Nimura, Courtney. 2016. *Prehistoric Rock Art in Scandinavia*. Oxford: Oxbow Books.
- Palm, Rune. 1992. *Runor och Regionalitet: Studier i variation i de nordiska minnesinskrifterna*. Uppsala: Institutionen för Nordiska språk.
- Pedersen, Ellen Anne, Frans-Arne Stylegar and Per G. Norseng. 2003. *Øst for Folden. Østfolds Historie Bd. 1*. Sarpsborg: Østfold Fylkeskommune.
- Petersen, Jan. 1916. *Gravpladsen fra Store-Dal i Skjeberg*. Kristiania: Universitetets Oldsaksamling.
- Resi, Heid Gjostein. 1986. *Gravplassen Hunn i Østfold*. Oslo: Universitetets Oldsaksamling.
- Røstad, Ingunn M. 2021. *The Language of Jewellery: Dress-accessories and Negotiations of Identity in Scandinavia, c. AD 400–650/700*. Oslo: Cappelen Damm Akademisk.
- Schetelig, Haakon. 1917. *Tuneskibet*. Kristiania: Universitetets Oldsaksamling.
- Schulte, Michael. 2023. "Runica metrica. Die metrische Gestalt der älteren Runeninschriften und ihre Grundeinheit der Proto-Langzeile." *Filologia Germanica* 15: 223–48.
- Seip, Didrik A. 1955. *Norsk Språkhistorie til omkring 1370*. 2nd ed. Oslo: Aschehoug.
- Solberg, Bergljot. 2000. *Jernalderen i Norge*. Oslo: Cappelen Akademisk.
- Solheim, Steinar, Kristel Zilmer, Judyta Zawalska, Krister S.K. Vasshus, Anette Sand-Eriksen, Justin J.L. Kimball and John A.M. Havstein. 2025. "Inscribed sandstone fragments of Hole, Norway: radiocarbon dates provide insight into rune-stone traditions." *Antiquity* 99 (2025): 422–39.
- Spurkland, Terje. 2001. *I begynnelsen var fupark: Norske runer og runeinnskrifter*. Oslo: Cappelen Akademisk.
- Spurkland, Terje. 2005. *Norwegian Runes and Runic Inscriptions*. Woodbridge: Boydell.
- Steinshamn, Håvard, Lars Nesheim and Anne K. Bakken. 2016. "Grassland production in Norway." *Grassland Science in Europe* 21: 15–25.
- Straume, Eldrid. 2011. "Gläser mit Fadenauflege aus

- norwegischen Gräbern des 5. und 6. Jahrhunderts n.Chr." *Bericht der Römisch-Germanischen Kommission* 92, 381–497.
- Stylegar, Frans-Arne. 2008. "...an ornament in peace and a defence in war": Late Roman weapon graves and military organisation in eastern Norway." In *Facets of Archaeology: Essays in Honour of Lotte Hedeager on her 60th Birthday*, edited by Konstantinos Chilidis, Julie Lund and Christopher Prescott, 243–62. Oslo: Unipub.
- Syrett, Martin. 1994. *The Unaccented Vowels of Proto-Norse*. Odense: Odense University Press.
- Thórhallur Eythórsson. 2012. "Three daughters and a funeral: re-reading the Tune inscription." *Futhark: International Journal of Runic Studies* 3: 7–43.
- Thórhallur Eythórsson. 2013. "On Tune's **sijostez** once again: a reply to Bernard Mees." *Futhark: International Journal of Runic Studies* 4: 191–4.
- Undset, Ingvald. 1878. *Norske Oldsager i fremmede Museer*. Kristiana: Kristiania Videnskabselskab.
- Vikstrand, Per. 2023. "Plural *tuna* names in Norway." In *Placing Place Names in Norwegian Archaeology*, edited by Sofie Laurine Albris, 79–98. Bergen: Universitetet i Bergen.
- Vogt, David. 2012. *Østfolds Helleristninger*. Oslo: Universitetsforlaget.
- Wangen, Vivian. 2009. *Gravfeltet på Gunnarstorp i Sarpsborg, Østfold*. Oslo: Kulturhistorisk museum.
- Werde, Ferdinand ed. 1913. *Stamm-Heyne's Ulfilas*. 12th ed. Paderborn: Ferdinand Schöningh.
- Zachrisson, Torun. 2014. "Rotary querns and bread – a social history of Iron Age Sweden." In *Seen Through a Millstone*, edited by Lotte Selsing, 181–91. Stavanger: Arkeologisk museum, Universitetet i Stavanger.
- Zilmer, Kristel and Krister S.K. Vasshus. 2023. "Runic fragments from the Svingerud grave field in Norway: earliest datable evidence of runic writing on stone." *NOWELE* 76: 233–303.
- Ødegaard, Marie, Lars Erik Gjerpe and Linnea Syversætre Jonannessen. 2023. "Maintaining boundaries: Early Iron Age settlement dynamics at Dilling in southeast Norway." In *Complexity and Dynamics: Settlement and Landscape from the Bronze Age to the Renaissance in the Nordic Countries (1700 BC–AD 1600)*, edited by Marie Ødegaard and Ingrid Ystgaard, 69–84. Leiden: Sidestone Press.
- www1: https://3d.unimus.no/bitfrost/single_viewer.html?obj=NDC55_KHMC2092 (acc. 15 June 2024).
- www2: <http://www.runesdb.de/> (acc. 15 June 2024).

Endnotes

¹ In the 1990s, Grønvik temporarily retracted his suggestion of **h** for the first legible rune line B1 and reverted to **z**, only to turn back to **h** once again a few years later (Grønvik 1994; 1998).

² Grønvik (1992) subsequently argued that a sequence **asini** on the newly discovered Malt runestone from Jutland was a further example of this lexeme. He has been followed in this by no other scholar who has attempted to interpret this admittedly highly challenging inscription (see especially Heltoft 2017).