Novus forlag · eISSN 1890-5455
DOI: 10.52145/mom.v117i2.2471
Maal og minne 2-2025 269–321

New runic finds from medieval Oslo

By Kristel Zilmer and Mark Oldham*

In 2021–2022, archaeologists from the Norwegian Institute for Cultural Heritage Research (NIKU) unearthed twelve small, portable objects with runes or rune-like markings during an excavation in Oslo. The excavation was conducted as part of large-scale archaeological projects linked to the construction of the Follo Line railway from Oslo to Ski, and it was related to the establishment of the new, enlarged *Middelalderparken* in Oslo. This article provides the first runological and archaeological analysis of the finds and their context. The objects, dating approximately from 1150–1350, contain inscriptions ranging from a few marks to longer and meaningful texts in Old Norse and Latin. The study highlights their significance as written and material evidence, following an integrated approach to runic artefacts as hybrid objects.

1 Introduction

Over the course of eight months in 2021–2022, archaeologists at the Norwegian Institute for Cultural Heritage Research (hereafter NIKU) discovered twelve items with runes or rune-like (script-like) markings in Oslo. The objects are of wood, bone, antler and metal. Some were used for the primary purpose of writing; others were functional items with added, secondary writing (cf. Franklin 2004 [2002]; Zilmer 2020). The inscriptions range from a few marks to longer and meaningful texts, in the Old Norse and Latin languages, and are new additions to the corpus

*. We are grateful to colleagues and former colleagues from the Norwegian Institute for Cultural Heritage Research (NIKU) for their efforts in the field and also their help with contextualising and dating the runic finds during the post-excavation phase of the project. We also thank the participants of the 35th international field runology meeting for their input on some of the finds from *Middelalderparken* and the reviewers of the manuscript for useful feedback.

of medieval runic inscriptions in Scandinavia. No inscribed items using the Roman alphabet were found, but a few markings have ambiguous features that may also resemble Roman letters.

The items come from one of the more recent excavations (Brunstad, Oldham, Haavik and Derrick forth.) in the succession of archaeological projects that have been undertaken in the period 2013 to today (e.g. Haavik and Hegdal 2020; Helstad and Dahle 2020; Nordlie, Haavik and Hegdal 2020; Edman et al in prep.; Berge et al in prep.) relating to the construction of a new railway line (the Follo Line) from Oslo to Ski. The construction works have cut through the site of the medieval town of Oslo, and the large-scale archaeological investigations have provided a rich material allowing archaeologists to gain new understandings of medieval Oslo. This particular excavation was in advance of works connected with the expansion and revitalisation of *Middelalderparken* in the area around and over the railway culvert – a condition of planning for the new railway.

In this article, we assess the twelve finds runologically and archaeologically and explore their features as written and material evidence. Individual presentations focus on each item and inscription, with parallels drawn to other known runic inscriptions. The discussion highlights the cultural-historical meaning of objects that served as material writing supports in the medieval town and communicated through script, language and material properties.

2 Archaeological finds of runic inscriptions from medieval Norwegian towns

Urban archaeological projects have contributed important evidence of medieval Scandinavian written culture. Inscribed objects reveal diverse expressions of literacy in medieval towns. Finds in Bergen, Trondheim, Oslo and Tønsberg from the mid-twentieth century onwards have enlarged the Norwegian runic corpus by hundreds of inscriptions. Wooden runic objects from the Bryggen wharf in Bergen are particularly well known (see sample overviews in Spurkland 2005; Barnes 2012; Düwel and Nedoma 2023). Early presentations were published by Aslak Liestøl (e.g. 1964, 1968, 1974). Volume six of the edition *Norges Innskrifter med de yngre Runer* (NIyR, Liestøl 1980; Johnsen and Knirk 1990) contained 171 inscriptions from Bergen. The Bergen corpus now exceeds 680 items

and accounts for the great bulk of the Norwegian medieval material of over 1600 inscriptions (e.g. Zilmer 2020; Magin 2023, with references to previous research). Trondheim has the second-largest urban corpus with a few hundred inscriptions. The seventh volume of NIyR (Hagland and Knirk forth.) will cover the Trondheim inscriptions (see also Knirk 2022 [2021]).

Prior to the discoveries in the area of *Middelalderparken* some 85 small, portable objects with runes or rune-like marks were known from Oslo (Zilmer 2021: 148–149). The majority were found during the excavations in the Old Town in the 1970s and 1980s (Liestøl 1977; Liestøl and Nestor 1987; Sand 2010; see also *Nytt om runer* 1986–2014). Some twenty were uncovered during the Follo Line excavations in 2013–2018 (Ødeby 2020; Haugan, Holmqvist and Zilmer 2024; Holmqvist in Berge et. al. in prep.). The clearly runic items among the latter are (parts of) wooden utensils and sticks. One folded lead tablet (Wilster-Hansen et. al. 2022) and a piece of stone were also found. The twelve most recent finds add new bones to the Oslo collection, besides several wooden objects and one metal item.

In a previous article on runic finds from Oslo, Kristine Ødeby Haugan (2020) reflects upon the reasons for what she considered to be the relative lack of such finds from the Follo Line excavations. The project in *Middelalderparken* has to a large degree followed the same methodological process, with more or less similar preservation conditions and types of modern disturbance. The main difference is the location within the medieval city, and perhaps more significantly also Ødeby Haugan's third factor – motivation and attention. This has nothing to do with the skills or qualities of the individual archaeologists, but more – as Herteig observed in Bergen (1969) – that there is a raised awareness, almost expectation, of finding more runic artefacts once the first, and then the second, and then the third example is found. There is something special with runes as a find category that spreads excitement in the field. Why more runic finds were made on this project than others is difficult to determine; one possible explanation, given the presence of thick rubbish layers here, is that this project had more of the "right" kind of deposits to find such runic objects, and that, in addition, this rubbish can have been transported from other parts of the city before deposition here.

Excavations in the twenty-first century, like the Follo Line projects, provide increasing evidence of the presence of writing in Scandinavian

towns. Recent approaches explore the co-existing runic and Roman script literacies in Scandinavian medieval written culture (e.g. Andersen et al 2021; Holmqvist 2021; Kleivane 2021; Bollaert 2022; Blennow and Palumbo 2022; Palumbo 2023). The materialities of writing and the role of objects as written, visual and material expressions of literacy in towns are also emphasised (e.g. Zilmer 2020, 2021). The medieval town enabled communication where inscribed objects performed different functions (Zilmer 2021: 169):

> The skills and practices of literacy in such settings (towns) found expression in more ways than solely through the applications of particular scripts, languages, textual genres, and such. We need also to pay attention to the detectable materials, physical appearances, designs, forms, sizes, shapes, as well as the varieties of graphical and visual marking that characterise the objects.

We similarly emphasise script-bearing objects as evidence of multiple engagements with literacy in broad sense, and in presentations of individual finds we shed light on their varied properties and possible functions. We further discuss how epigraphic and material habits interacted and depended on each other within the setting of a medieval town, with reference to other finds from urban contexts. We also utilise the concept of *bricolage* (Lévi-Strauss 2021 [1962]) to expand the discussion and explore how the rune-inscriber is affected by the materiality of the items that are available or accessible. The runic objects of medieval Oslo further express how the town was connected to European networks through trade, Christianity and shared practices and norms.

Initially established as a harbour and trading site in the early eleventh century (e.g. Molaug 2015: 213, 2002: 23), but with evidence of settlement from the 600s (Alvestad, Derrick and Oldham forth.), medieval Oslo lay mainly between the two rivers Hovinbekken in the north and Alnaelva in the south. It was a relatively compact city, albeit one with areas of varying intensity of use, with enduring plot subdivisions and structuring features such as the main streets. Two centres of power developed at opposite ends of the city – religious power in the form of the bishop's manor complex (*Bispeborgen*) and cathedral (*Hallvardskatedralen*) in the north, and the royal manor (*Kongsgården*) and church (*Mariakirken*) on the Øra peninsula in the south. The city was structured around the main thoroughfares, east-west *allmenninger* and north-south *streter*,

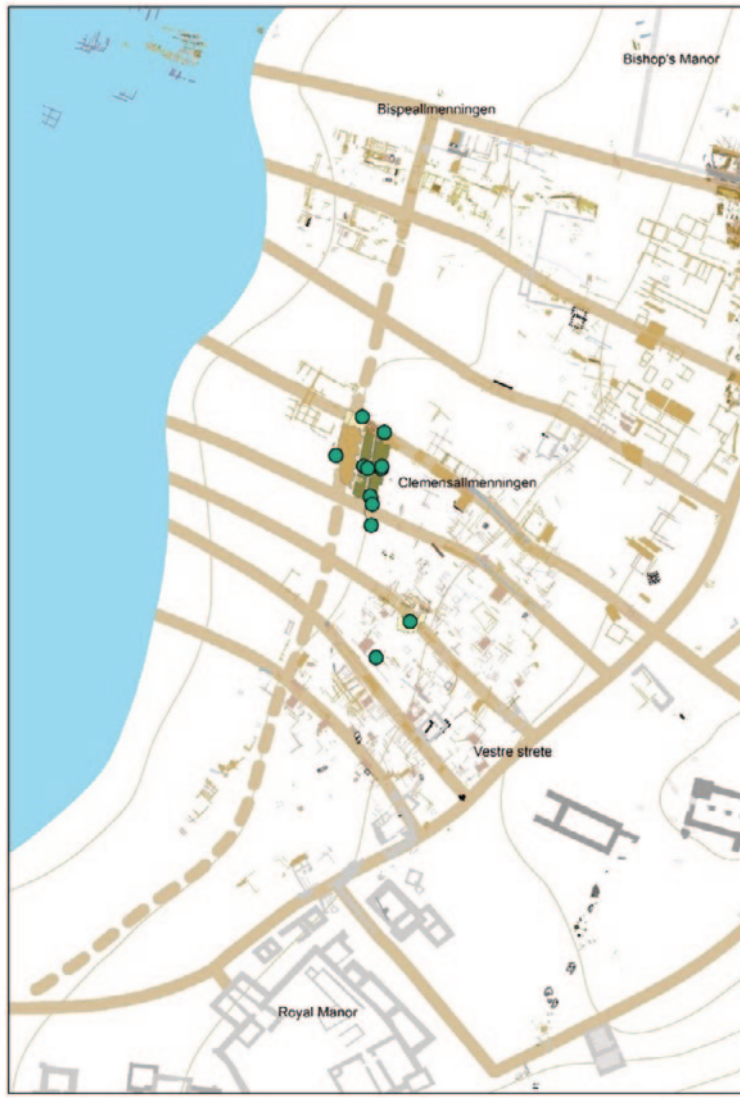

Figure 1. Runic finds from *Middelalderparken* (green circles) in the context of the medieval city. Map by Mark Oldham, NIKU.

of which Bispeallmenning (from the bishop's palace to the harbour), Clemensallmenning (from the city's earliest church, the Church of St Clement, to the harbour), and Vestre strete (from the royal palace to the bishop's palace) have been investigated as part of the Follo Line excavations and other recent projects in Oslo (see studies in Bauer et. al. 2024).

In between these two centres of power were the homes, urban farms, cottage industries, markets and bustle of everyday life. However, recent excavations (e.g. Nordlie, Haavik and Hegdal 2020; Brunstad, Oldham, Haavik and Derrick forth.) suggest that there were also open areas and wasteland/rubbish dumps and that certain plots lay unused until later in the Middle Ages. The excavation in *Middelalderparken* seems to support this, with little evidence for buildings immediately south of Clemensallmenningen within the timespan of the excavated deposits (1050–1400).

The runic inscriptions were found in the main excavation area of the first archaeological investigation relating to the construction of *Middelalderparken* (2021–2022). This area was very large, around 3700 m^2. However, the works did not require that all archaeological deposits were to be excavated to sterile layers, but rather to a set depth. In some areas this means that just the surface features were registered, but in others approximately 1 m of archaeological deposits were to be removed. There was also a reasonable amount of modern disturbance that cut through the archaeology, such as trenches for electricity cables, foundations for buildings, and remains of earlier railway infrastructure. This 20th century activity meant that preservation conditions in the higher archaeological deposits were in places relatively poor, but good to excellent lower down.

The results of the excavation appear to suggest that this part of the early medieval city (1000–1300) was home to tannery and leatherworking, as well as handicrafts utilising other animal-based raw materials such as bone and antler. There is also evidence from butchery and the slaughtering of animals (pigs, cows and even horses) for meat. Some houses and enclosures were found, along with streets and drains that match up with discoveries from investigations done in the early part of the 20th century. In addition, wells and constructions for water storage – likely in connection with tanning – were found nearby. Large amounts of rubbish/waste were found deposited as make-up, both in the immediate area relating to tanning and also nearer the main east-west road, Clemensallmenningen, which was uncovered in the north of the excavation area.

The twelve inscribed objects were almost exclusively found in waste deposits throughout the excavation area; there does not seem to be any concentration or pattern to the deposition, or correlation between type of material, type of runic find and find location. The relevance of find location is in most cases limited, given their finding in waste deposits, as rubbish could have been collected from multiple locations before being deposited where it was uncovered by archaeologists. Indeed, it may have been deposited and moved multiple times before this final deposition.

3 Presentation of finds

The presentation starts with wooden objects, followed by bone and antler objects and a single metal find. We assess the find circumstances, context, and possibilities of archaeological dating. Regarding inscriptions, the focus is on determining runic and other marks, establishing readings (with transliterations that render runic inscriptions in corresponding conventional Roman letters) and discussing possible interpretations. The probable functions of inscribed objects in their detectable state are also assessed, for example whether they worked primarily as suitable writing supports or were functional items.

The archaeological investigation was undertaken using the single-context method, where each stratigraphic unit (layer/cut) is given a unique identification number. Each artefact is also given an individual number. Archaeological information regarding both layers and finds is taken from the project's GIS database, *Intrasis*, which includes documentation of the characteristics of each stratigraphic object in addition to geographical information. The objects that were identified as runic finds in the field have a precise geographical location, but those identified during the post-excavation process have a less precise location being solely related to the layer in which they were found.

Waste deposits are accumulations of material such as household rubbish and production waste, human and animal cess, and wood chippings from building construction. The timeframe for such deposits is often difficult to determine with confidence, as these layers can build up over time, be mixed or disturbed, be collected from other areas and then deposited, or be older layers that are moved at a later date. This means that dating can be problematic without also having an understanding of the

dating for the layers that are over and under; in this case we have a good and reliable stratigraphic sequence for the site, that means that we can place most of the runic finds from this site in time with a reasonable degree of confidence.

Find number	Layer number	Description	Dating
F7377	SL7386	Runic stick (3.1.1)	1150–1250
F54410	SL54473	Runic stick (broken weaving-shuttle?) (3.1.2)	No later than 1300
FT42413	SL41660	Wooden ownership marker with runes (3.1.3)	1150–1350
FT44801	SL43752	Wooden item (lid/lable?), possible ownership marker with runes (3.1.4)	1150–1250
F7161	SL7000	Runic bone (3.2.1)	Before 1150
FB48323	SL46035	Runic bone (3.2.2)	1160–1470?
FB15467	SL14259	Runic bone (3.2.3)	1200s
F46013	SL42090	Bone with script-like marks (3.2.4)	1150–1350
F552951	SL53932	Bone with script-like marks (3.2.4)	Unsure
F43508	SL41386	Bone with a monogram (3.2.5)	Unsure
FB48800	SL48181	Hairpin of antler with runes (3.2.6)	1150–1250
F48300	SL48239	Metal amulet with cryptic runes (3.3)	1160–1220

Table 1. Overview of objects, layers and dating

The objects have been runologically examined on several occasions prior to conservation, in varying conditions and at least once with stereo and digital microscopes. One exception is a wooden stick (F54410, see 3.1.2), which was damaged during the excavation and thus sent to conservation promptly after the first inspection. This stick is not yet available for further study. One inscribed bone was examined first in June 2023, after detecting faint marks; the second inspection was conducted in October 2024 (F552951, 3.2.4). Pre-conservation examination allows for documenting the features of the objects and inscriptions as first found. Some complications are caused by (wooden) items being moist, with dark and reflecting surfaces. Some features (e.g. dotted runes and other small marks) need to be checked repeatedly, also after conservation. As per October 2024, four objects (F7377, FT42413, F7161 and FB48323) have been examined at least once in their post-conservation state. Three objects (FB48323, FB48800 and F48300) were available for joint study during

a meeting for field runologists at the Museum of Cultural History in October 2024.

The runological documentation material includes descriptions, photos and drawings that show details of runic forms (graphs). Principles of transliterating runes into Roman characters have been a matter of discussion, with (partly) diverging conventions (e.g. Barnes 2013). Transliteration serves as a useful way of presenting inscriptions, while not covering all their features. Here we indicate damaged or otherwise uncertain characters with a dot underneath; unreadable traces of runes are marked by -, and lacunae by — (when the number of missing runes is unknown). Ambiguous marks and signs are indicated by ?; bind-runes (ligatures) have a bow above, e.g. **o͡l** ; cryptic runes (decoded) are placed within < >. Marks such as single or multiple vertically aligned dots and strokes that may separate between words/units of meaning in inscriptions (interpunctuation) are represented in a simplified form and referred to as separator marks in descriptions. All transliterations are in bold. Drawings provide further graphic details and are used instead of idealised renderings with runic fonts (transrunifications).

3.1 Wooden objects

3.1.1 Runic stick with Latin and Old Norse religious formulae

A flat, four-sided stick (no. C64430/51, F7377, Museum of Cultural History) has runes on both of its wide sides and one narrow side.[1] The stick was found in December 2021 at the bottom of a layer of compact and homogenous manure and household waste, which also included a large amount of leather clippings, most likely from shoemaking. The find was washed out by groundwater, and as such not found in situ, but is most likely from this deposit. Based on pottery finds, stratigraphy and dendrochronology, the layer probably dates to 1150–1250.

The stick is damaged at both ends and measures up to around 14 cm in length, 2.7–2.8 cm in width, and 1 cm in thickness. Surface damage

1. C64430/51 is the current museum inventory number. Note that subnumbers, distinguished with the symbol /, may in some cases change during the cataloguing process and that multiple objects can belong under the same main inventory number and subnumber. F7377 is the individual find number that identifies the specific object. First information of the find was shared 28.12.2024: https://www.niku.no/2021/12/unike-runefunn-i-middelalderparken.

Figure 2. Runic stick F7377 after conservation. Photo by Museum of Cultural History, drawing by Kristel Zilmer, Museum of Cultural History. CC BY-SA 4.0.

A ·**manusḍominisiþsu-[–**
B **bryn:gærþr:er:þæt:fo͡l:**--[–
C **þatẹrsat**
A *Ṁanus Domini sit su*[... (possibly: *su*[*per*])
B *Bryngerðr er þat fol/fól*[...
C *Þat er satt*.

"The Hand of Lord, be (upon)...
Bryngerd who/which that... (or: Bryngerd is that...) (possibly: entrusted).
That is true."

has affected some runes; a few by the ends are not intact. The runes along the narrow side are small and impacted by fractures in the wood. Pre-conservation examination revealed that tiny surface particles in the mid-section of the first rune were loosening; certain details appear altered post-conservation. This pre-conservation inspection was important as it allowed observations before such changes occurred. Uncertainties in reading are otherwise related to some separator marks and dotted runes (runes supplied with dots/dashes indicating altered sound values). The inscription likely begins on one wide side, A, marked by a small cut. The opposite wide side is identified as B, the narrow side as C. Alternatively, one could rotate the object, in which case the narrow side C follows A, and then comes the opposite wide side B. The phrase on side C, however, provides a fitting completion to the inscription (see below).

Side A has sixteen fully or partly preserved runes. The runes of full height are around 2.8 cm, extending across the entire surface. A casual cut in front of the first rune may indicate a starting spot and is included in the transliteration. Faint traces between runes no. 5 and 6 show likely damage (in comparison to intentional separator marks on side B). Runes no. 1 and 8, **m**, have sidestrokes (branches) where the left ones link to the staves higher than those on the right. Runes 4 and 16 (the latter damaged), **u**, are slightly open at the tops. Rune 6 is a likely dotted rune, **d**. There is a vertical dash next to its branch up on the left, but its purpose needs some consideration, as there appear tiny cuts near a few other staves in the inscription. During the initial examination without microscope, it was considered possible that traces by rune 11, **i**, could show dotting (**e**). Further inspections revised this assessment. Small fractures around the stave result from cutting through the wood grain, with similar traces elsewhere. From rune 12 onwards, the inscription is somewhat damaged, but the outlines of runes are visible. Runes 12 and 15 are both short-twig **s**; the former may have a slight mark by the bottom, perhaps a trace of dotting. The last identifiable rune is **u**. Along the broken edge, the upper part of an additional vertical can be detected; more runes likely followed.

Side B has sixteen readable runes, including one bind-rune. Traces of additional runes (possibly two) are visible near the broken right end. Separator marks, one of which appears within the personal name, consist of small strokes. The first three runes are shorter due to the way the stick is shaped, while the rest are as on side A. Rune no. 1, **b**, is slightly dama-

ged, with some of its bottom missing and fractures by and inside its pockets. The four **r**-runes (nos. 2, 7, 9 and 11) have closed, curving heads that start slightly below the tops of the staves. Rune 5 is dotted, **g**, as is 10, **e**. The two **æ**-runes, 6 and 13, have diagonal branches. Runes 9, **r**, and 12, **þ**, have narrow bows added to the left of their staves (partly intersecting), perhaps a decorative feature. Rune 15, **f**, has curved branches. Rune 16 is a bind-rune of **o** and **l**. The traces that follow indicate a (partly) surviving separator mark and two parallel (damaged) vertical lines. Further to the right, along the broken edge, a short slanting incision is visible. Occasional incisions near some staves are notable on sides A and B, their placement varies, and they do not indicate dotting. Some are cuts extending over from other side, while other marks may show draft incisions or remnants of earlier carving.

Side C has eight runes that span from top to bottom, roughly 1 cm in size. The first rune has sustained some damage, especially in its mid-section. The outline could suggest **þ**, **r** or **b** (other options are less likely). Microscope inspections support reading the rune as **þ**. Other runes, although small and partially affected by fractures, are clearer. Rune 4 is likely dotted, **e**; the bottom of rune 6, **s**, is affected by the branch of the rune that follows, i.e. **a**.

The stick is a good example of an adaptable writing support, and its content shows Latin and vernacular religious discourse. The start, *Manus Domini,* echoes a common prayer, representing the words of Jesus Christ on the Cross: *In manus tuas, Domine, commendo spiritum meum* ("Into your hands, O Lord, I commend my spirit"). Versions of the prayer appear in runic inscriptions, such as one on a grave cist from Hästveda, Skåne: *In manus tuas, Domine, commendo spiritum tuum, Ása* ("Into Thy hands, O Lord, I commend thy spirit, Ása", DR 350, see *Runor*).[2] That text uses the vocative form of *Dominus*, **domine** (*Domine*). Other inscriptions that incorporate parts of the formula are Sm 145, grave slab from Ukna, Småland and a runic amulet from Spånga, Uppland (U ATA322-1668-2011 in *Runor*). The word *Dominus* (with variant spellings and grammatical forms) appears in some fifty currently registered Scandina-

2. Web resource *Runor* https://app.raa.se/open/runor/search; see also the database of Danish runic inscriptions where the runic signum is DK Sk131, https://runer.ku.dk/q.php?p=runer. Scandinavian inscriptions are presented according to these databases (including English translations, with small adjustments in spelling), unless otherwise specified.

vian inscriptions; it also features in formulae, such as the *Ecce crucem Domini* ("Behold the cross of the Lord") and the prayer *Ave Maria* (on runic Latin Christian inscriptions, see e.g. Knirk 1998; Zilmer 2013; Kleivane 2018, 2020). On the Oslo stick the genitive *Domini* appears to be recorded (see the assessment of the final rune above). The runes by the end of side A, **siþsu**, may stand for *sit su[per]…*("be upon"). The word *sit* has the spelling **siþ** (on runic Latin features, see e.g. Gustavson 1994a, 1994b; Knirk 1998; Olesen 2007, 2021; Palumbo 2022). A runic lead amulet from Odense, Denmark records *sit super* in the phrase *crux Christi sit super me* ("the cross of Christ be over me", DR 204).[3]

The beneficiary of the message seems to have been a woman called *Bryngerðr*. The sequence on side B is not entirely clear due to damage at the end, but the Old Norse name introduces a vernacular utterance with *er þat*. The word *er* could either indicate a relative clause ("who/which") or the third-person singular present verb form ("is"). It could be understood as *Bryngerðr er þat* ("Bryngerd is that"), stating the name of the person turning to God on side A. Regarding the continuation with **fo͡l**, the sequence could also be reconstructed as the verbal phrase *er þat fol*[*git*]. The common meaning of *fela* is "hide", but it also means "entrust, commend oneself" – here possibly "it is entrusted". This would fit with the religious content, paraphrasing the Latin prayer about commending oneself into the hands of Lord. The traces of damaged runes at the end, however, do not match entirely with the proposed reading in their now visible form, due to a slanting cut (possibly a runic branch) to the right of the surviving parts of the two verticals. Another matter concerns the separator mark following the bind-rune, but the same occurs within the personal name (*Bryngerðr*). An alternative arrangement of the bind-rune could give *flo/fló[…],* without any convincing interpretation alternatives. Although some details remain uncertain, it is likely that side B accords with the sayings on sides A and C. This part identifies the person turning to God – either recorded in her own words or by someone else.

Side C (when reading the first rune as **þ**) is interpreted as *Þat er satt* ("That is true"). As pointed out by James Knirk,[4] this serves as a concluding statement corresponding to the *Amen* of Latin texts. Similar say-

3. Alternative signum DK Fyn23.

4. Knirk, presentation 10.10.2024 during the 35th international meeting of field runologists in Oslo.

ings occur in other runic inscriptions. One from the Urnes stave church in Norway says: *Haldi hinn helgi Dróttinn hǫnd yfir Brynjolfs ǫndu. Þat sé satt* ("May the holy Lord hold (his) hand over Brynjolfr's spirit. May it be true", N 319, Olsen 1957: 100–102). A sixteenth-century inscription in Bunge church in Gotland includes "That is true" among other phrases, such as "God is good" (G 331, Gustavson, Snædal and Källström, online manuscript).

3.1.2 Runic stick with the Ave Maria

A second runic stick is in two fragments that fit together (C64430/81, F54410). It was most likely broken during the excavation, and a small fragment is now missing. The stick was found in July 2022 in a layer comprised of humus with wood chippings. The deposit included typical waste such as animal bones, shoes, baking stones and wooden objects. Stratigraphy suggests that the layer is from no later than 1300. The layer was excavated with a mechanical excavator, which makes the recovery of such a find more remarkable; first one fragment was found, and then later the other. The fresh break was likely caused by the mechanical excavator. The stick also has an older break at one end. At the other end, a rectangle is cut out of the wood; this made it possible to attach the stick to something. The shape could indicate functional use as a weaving shuttle, or it could have served as someone's personal amulet. When the two fragments are joined, the maximum length is c. 14.4 cm, and the width is 2.5–3 cm (prior to conservation). The larger fragment is about 10.9 cm long, and the smaller one about 3.7 cm (there is some overlap when the fragments are assembled). The rectangular hole measures c. 2.4 x 1.7 cm. There are no traces of markings on the opposite side. The sizes of runes vary between 2.4 and 3 cm. Despite fragmentation, most runes are intact and readable.

The stick has twelve runes, including two bind-runes as well as two surviving separator marks. The first has four vertically aligned incisions. The second is damaged, but there seems to be a longer cut in the upper part and a shorter one underneath. The upper line may contain two tightly spaced incisions; some other traces appear nearby. This mark may thus also contain multiple incisions, but this needs to be checked with a microscope after conservation. The inscription starts with a bind-rune of **a** and **u**; the fourth is a bind-rune of **a** and **r**. Both types are common in medieval runic inscriptions (MacLeod 2002). There are two dotted

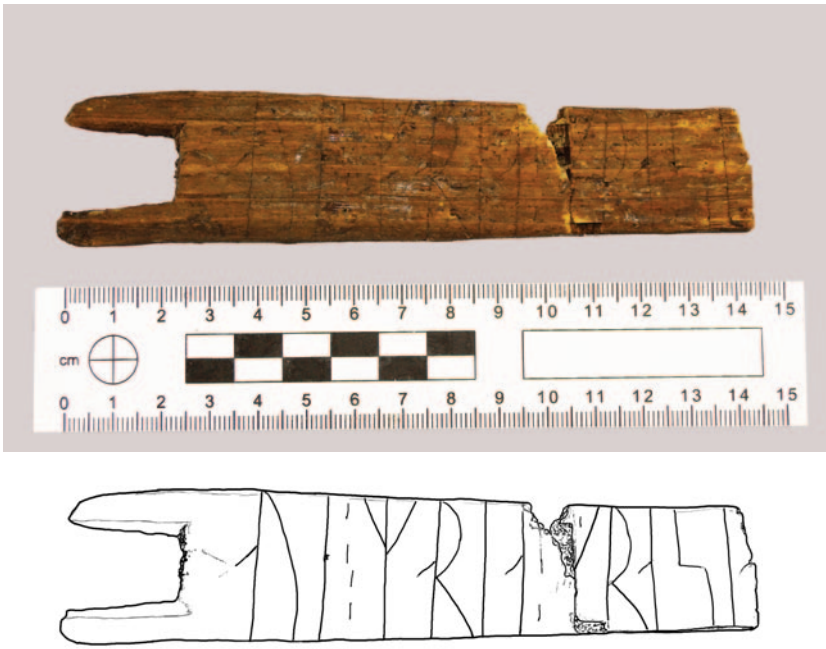

Figure 3. Runic stick F54410 prior to conservation. Photo and drawing by Kristel Zilmer, Museum of Cultural History. CC BY-SA 4.0.

a͡ue⁞ma͡ria:gracia̩
Ave Maria gratia.

runes, no. 2, **e**, and 7, **g**. The latter is damaged, but identifiable. Rune no. 3, **m**, has relatively straight branches; the one on the left slightly higher than the right. The **r**-runes – no. 8 and the one belonging to the second bind-rune – have rounded heads. Rune no. 10 is a long-branch **s** of three lines where the middle one is almost horizontal, transliterated as **c**. The stave of the final **a** is lost due to damage, but the branch on the left survives.

The inscription cites the beginning of the prayer with the Angel's greeting to the Virgin Mary. The words *Ave* and *Maria* contain bind-runes; these are some features that can reflect runic strategies of visually rendering and memorizing a common prayer (Zilmer 2013; Kleivane 2018). Among runic inscriptions from Oslo, part of the *Ave Maria gratia* may be recorded on a building brick, as **ariak** (A 9, C33094, e.g. Knirk

1998). This most recent find adds one certain record of the prayer to the Oslo corpus.

3.1.3 Ownership marker: Asbjørn owns me

A piece of shaped wood (C64430/69, FT42413) was found in January 2022 in a large waste deposit with wood chippings and manure as well as possible building remains – planks and foundation posts – that are partially burnt. In addition, the deposit contains household waste such as animal bones, nutshells, fruit stones and seeds, textile fragments and pottery, as well as broken wooden utensils. The deposit is difficult to date precisely but is likely from 1150–1350 based on pottery finds and dating of nearby structures. The object is roughly shaped, with a narrowing in the middle and two broader ends that are missing small bits. The shape suits an owner's tag that could be attached to items. The tag is c. 11.5 cm at its longest and 3.3 cm at its widest, and 1.3–1.4 cm thick. It is mostly flat, with smoothed surfaces, except for one thicker irregular end. The runes must have been made after the tag was shaped; their sizes are adjusted and increase gradually. The first rune is c. 1.2 cm, the last 2.5 cm. The inscription begins to the right of the narrow part of the tag and covers most of its right half. The final rune crosses over the irregular end. Some casual scratches are visible near both ends.

The inscription contains eight runes, including one bind-rune. To the left, there appear a few casual scratches. Close to the first rune, there runs a slanted surface crack. Rune no. 1, **a**, has an extended and curving, thinly incised branch. Rune no. 2 is a short-twig **s**, with casual marks by its lower part (not dotting). The third rune is read as **b**. The upper pocket is large and uneven, the bottom one is open, and the rune can resemble **r**. The lower pocket curves inward to the left, also extending over the edge of the tag. The likely intention was to incise **b**, without closing the lower pocket. The branch of rune no. 5, **n**, crosses the branch of the bind-rune of **a** and **m**. The left branch of **m** crosses the stave. The last rune, **k**, is narrow, with a slightly curving branch.

The common personal name *Ásbjǫrn* is spelled as **asbin**. Medieval attestations of the name vary (Lind 1905–1915: 63–65, 1931: 53–64), showing different articulation and spelling practices. A shaped piece of wood (peg) from medieval Tønsberg, dated to the fourteenth century, gives the name in runes as **asbi̩n** (A 218, C34986/TL 0269 d, Gosling 1989). The recorded endings with -(*n*)*n*, instead of *-rn* suggest that /r/ has merged

Figure 4. Owner's tag FT42413. Photo and drawing by Kristel Zilmer, Museum of Cultural History. CC BY-SA 4.0.

asbin͡amik
Ásbjǫrn á mik.

"Asbjørn owns me."

with /n/. The Oslo find probably shows assimilation from *rn* to *nn*, due to /r/ being influenced by the following /n/. Similar traits can be detected in runic inscriptions from around the twelfth/thirteenth centuries onwards and appear in medieval documents (Seip 1955: 173–174).

Ownership inscriptions contain personal names, sometimes together with the verb *á* and occasional additions about what the person owned. As an example of the latter, one tag from Bergen (N 722, BRM 0/30412) says: *Ragnarr á garn þetta* ("Ragnar owns this yarn", Johnsen and Knirk 1990: 186–188). The message of the Oslo tag is "owns me"; its purpose

was to document ownership over some other items, not the tag itself. Similar formulae in the first person feature in epigraphic traditions across time and cultures, showing how objects were made to talk about who owned or made them.

3.1.4 Possible ownership marker

This worked flat piece of wood (C64430/69, FT44801) was found in January 2022 in a latrine or waste layer with many finds. The layer consists of twigs and wood chippings towards the top, with a higher concentration of cess towards the bottom, along with building remains such as bricks and burnt logs. Artefacts found in the layer include leather, combs, textiles, food remains, rope as well as hair, baking stones, pottery, moss, and heather. The layer likely dates to 1150–1250 based on stratigraphy, dating of nearby constructions, and pottery finds. This object has an interesting shape, resembling a label or half of a lid. Deep cuts along one edge form four curved blades of varying sizes. The other edge is partially smoothed, possibly after the item was split or broken. The object measures up to around 7.8–8 cm in length, 3.1 cm in width, and 0.7 cm in thickness. Runes appear on one flat side. The splitting must have occurred afterwards, as some runes are missing their tops. The shaping of the other edge has not impacted the runes directly.

Eight runes have their staves and branches at least partially intact. The sizes are between 1–1.4 cm; the last runes are slightly larger than those at the start. The inscription falls into two parts; there is a small gap with an incision between runes no. 4 and 5. No other marks appear before or after the runes, nor on the opposite side of the object. Rune no. 1, about 1 cm high, is not full height. It is marked as an uncertain (damaged) **a**; there is a slight trace of a branch on the left. The branch of rune no. 5, also **a**, now appears close to the stave-top (resembling **t**). Runes no. 2 and 6, **m**, differ in the shape and position of their branches. The same applies to runes no. 4 and 8, **k** – the branch of the latter is more curved.

The text repeats *á mik* ("owns me") twice. There is no owner named, or at least the name does not survive on this present item. One (incomplete) inscription with **amik** appears on a bottom part of a wooden vessel from Bergen (B 613, BRM 76/11744). The Oslo find perhaps served as a practice piece, a writing sample. It is uncertain whether any text is missing here. The varying shapes of **m** and **k** could suggest different carvers, but such minor internal variations are not conclusive. It may be that the

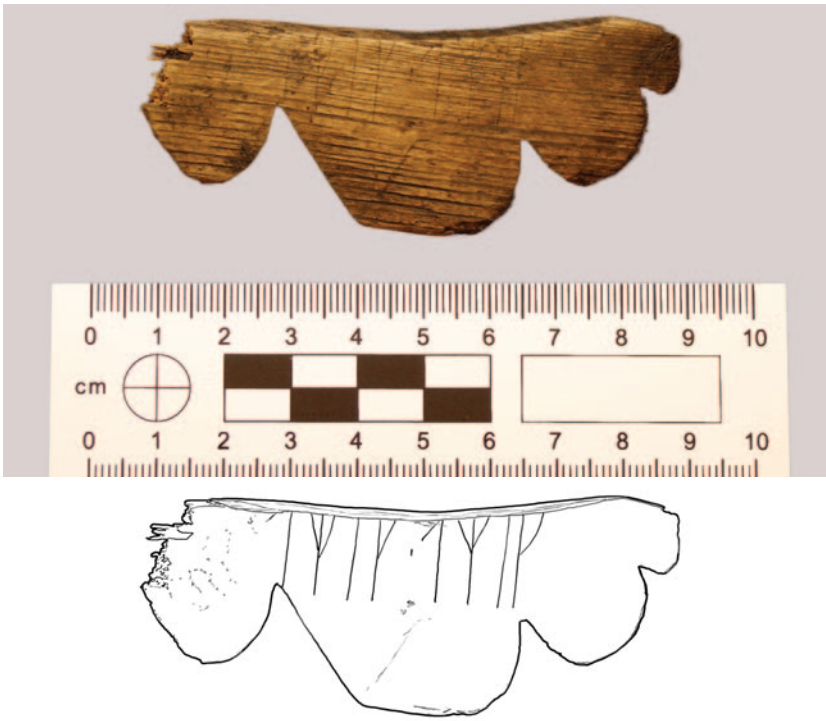

Figure 5. Possible ownership marker FT44801. Photo and drawing by Kristel Zilmer, Museum of Cultural History. CC BY-SA 4.0.

ą̇mik·amik
Á mik, á mik.

"Owns me, owns me."

use of runes helped to personalise or decorate the item, while also recording a message about ownership.

3.2 Objects of bone

3.2.1 Runic bone talking about the bone?
A broad rib bone (C64430/156, F7161), likely from a larger animal such as a cow or horse, was found in December 2021 in a layer of mainly grey sand with waste sediments. No pottery was found in this layer, but based on stratigraphy and dating of nearby structures, it is likely that this layer

is from before 1150. The bone is around 21.1 cm at its longest and 4.2 cm at its widest. Both ends are broken, but the runic sequence appears complete. The sizes of runes are c. 2–3 cm.

There are thirteen runes on one side and one faint rune on the opposite side (upside down in relation to side A). Two casual cuts appear in front of the inscription, with a gap in between; these are included in the transliteration, although their intention is uncertain. The runes on side A have clear contours. The **b**-runes (1 and 10) have pockets that do not cover the full length of the stave. The thinly scratched **b** on side B has a similar shape. The same carver could have marked both sides, before completing their work on one, or the separate **b** may be an imitation. Runes no. 2 and 5, **a**, both have a slanting branch on the left. The diagonal branch of rune no. 11, **æ**, cuts through the stave on both sides. In comparison, rune no. 8 appears as a mid-stage between these two; its branch intersects the stave but remains short on the right. It is transliterated as **æ**, distinguished from the two clear **a**-runes. Such traits may be accidents of carving where one branch was incised either too long or short. Alternatively, the carver may have done this on purpose (see below). The two **r**-runes (no. 6 and 9) differ – the former has a short head attached to the stave; the latter has a large and open head. Rune no. 4, **m**, has additional short strokes connecting to its branches. The left branch extends through the stave and forms a tiny curve to the right. A short angular cut by its top provides a further connection to the stave. Another incision runs parallel to the stave, connecting to the branch on the right. These features create an interesting (stylised) version of **m**, unless the point was to create an unusual bind-rune.

Regarding interpretation, one clue is the word **bæin**, *bein* ("bone"), referring to the object. Grammatically, **basmarþær** can contain a name or nickname in the genitive case, composed of **bas** and **marþær**. The part with *Marðar* would be the genitive of *Mǫrðr* (the meaning of the noun is "marten", see e.g. Lind 1905–1915: 779–780).[5] The name was arguably used to some extent in Iceland, until around the thirteenth century. Rune no. 8, its form somewhere in between **a** and **æ**, could perhaps indicate that the vowel in the case ending had an unclear (weaker) articulation – the carver may have been uncertain as to which rune to use. The first ele-

5. See also *Dictionary of Old Norse Prose* (ONP): https://onp.ku.dk/onp/onp.php?056120.

ment, **bas** is peculiar. There is a Norwegian gravestone inscription with runic and Roman writing where BAS in Latin letters is explained as a name element (N 457, Liestøl 1960: 18–22). According to the edition, this may show deviant spelling of the byname *Bátr* (Boat); on the byname, see Lind (1920–21: 16–17). Other explanations of **bas** are possible,

Figure 6. Runic bone F7161. Photo and drawing by Kristel Zilmer, Museum of Cultural History. CC BY-SA 4.0.

A ··**basmarþærbæin**
B **b**

Báts-Marðar/Báss-Marðar bein.
"Boat-Mård's/Boose-marten's bone."
Or:
Báts-Mǫrðr/Báss-Mǫrðr er beinn. / Báts-Maðr er beinn.
"Boat-Mård/Boose-Mård is hospitable." / "Boatman [nickname/occupational title] is hospitable."

for instance as the masculine noun *báss*, "boose" or "stall (in a cowhouse)". The inscription could be interpreted as *Báts-Marðar bein* or *Báss-Marðar bein*, either referring to a person or an animal – in the latter case, serving as a poetic label.[6]

A double meaning or playfulness is possible. The meaning of *mǫrðr* is "marten", as for example attested in the compound *marðskinn*, ("marten's fur"). This word seems to have been at some point (mistakenly) included among poetic designations for ram (male sheep), in the Icelandic material (Cleasby and Vigfusson 1874; ONP)[7]. The Oslo bone belonged to a larger animal, but perhaps the text was poetically or jokingly labelling the bone as "boose-marten's bone" or "boose-ram's bone" (a form of kenning). Perhaps a point was made about the bone as such, similar to some other runic bones – fragments of bones often served as handy material for runic writing once disconnected from their original setting, while potentially reminding users of their origin. One from Lund claims: **bin is þita bin is þtǫ**, *Bein er þetta, bein er þetta* ("This is bone, this is bone", DR 302).[8] A bone yarn winder from Lund records **tinbl:bein**, possibly *teinbeinn* ("twining-bone", DR EM85;471).[9] A piece of bone from Schleswig may contain the word **bukaben**, *bukkabein* ("buck-bone", a goat's bone or leg, DR Schl17).[10] An alternative reading is **sbukaben**, as an owner's inscription *Spinka ben* ("Spinki's bone/leg"). The database of Danish runic inscriptions notes that some playful ambiguity may have been intentional (see also Nielsen, Stoklund and Düwel 2001: 224–225).[11]

Alternatively, **bæin** could refer to the adjective *beinn* ("hospitable, helpful"). In this case, **ær bæin** could be the phrase *er beinn*, while **basmarþ** would contain a name of a person (or animal?) in the nominative case, such as *Báts-Mǫrðr* or *Báss-Mǫrðr* (the masculine ending -r omitted in the consonant cluster). Alternatively, **marþ** could be a misspelling of

6. It can be noted that a poetic word for "bear", *Bássi* (m., used as a suffix in compounds) can refer to someone large or well fed. See ONP: https://onp.ku.dk/onp/onp.php?o7265.
7. Cleasby and Vigfusson [1874], https://cleasby-vigfusson-dictionary.vercel.app/word/mordr; see also ONP: https://onp.ku.dk/onp/onp.php?o56120.
8. Alternative signum DK SkL15, museum no. 38393:2.
9. Alternative signum DK SkL25, museum no. 53436:8.
10. Alternative signum DK SlB17, museum no. KS D 380.145.
11. See https://runer.ku.dk/q.php?p=runer/genstande/genstand/885.

maþr, *maðr* ("man"), with the two runes switched at the end. This would give the message: "Boatman [nickname or reference to a crew member] is hospitable". These interpretations are weakened by assuming spelling errors. A more straightforward explanation is that the inscription designated the bone or its owner. The setting may have involved a shared meal among a group of people where learning and entertainment, including the use of runes, would have been welcome.

3.2.2 Runic bone that invites interpretation

Another rib bone (C64430/156, FB48323) was found in March 2022 in three fragments. Two were found together, the third close by. The context is a waste deposit with a high proportion of manure, wood chippings and twigs. There is also localised human faeces and moss, suggesting that the area may have been used as a latrine or that human waste was dumped here. There was otherwise typical medieval urban waste such as animal bones, fragments of shoes and other leather objects, broken household objects, and some textiles. Dating based on pottery finds in this deposit is difficult, as there are fragments dating from the early Middle Ages to the post-Reformation period. Stratigraphy and comparative dating with related structures suggests that the layer has an earliest possible dating of 1160–1220 and a latest possible dating of ca. 1470, echoing the dating from pottery finds. Hence, this waste deposit was either in use over a long period or is an agglomeration of waste deposits from different areas and/or times.

Prior to conservation the two larger fragments with runes measured c. 11.3 and 9.4 cm in length, while the third fragment was about 4.9 cm long. The main fracture ran diagonally across the bone. The fragments were easy to assemble, but there was risk of further crumbling. The post-conservation measurements of the assembled bone are up to 13.3 cm in length and 3.9 cm in width; thickness of the largest fragment is 0.7–0.8 cm. The lines composing most runes (except the first two) are divided between the two larger fragments, with sizes ranging from c. 2.2 to 3.9 cm. The final four runes are larger than the initial three and span almost the entire surface. The distance between the first and last rune (staves) is about 5.7 cm. Seven runes are identifiable.

Rune no. 1, **r**, has an angular closed head positioned below the top of the stave. There are additional incisions between the first two runes, partly intersecting with the first one (see Figure 7 and below). Two small,

faint vertical cuts also occur in the lower section between runes no. 2, **a**, and 3, **þ**; this placement does not make it likely that these are separator marks. Rune no. 3 might at first glance resemble a hastily cut **u**. Its pocket consists of several, partly overlapping incisions, and these connect the pocket to the stave on the left, forming **þ**. Rune no. 4, **u**, is large, with a curving branch that starts below the top (higher than the preceding rune). It turns slightly inwards in the lower half but does not approach the stave. There are no marks along the edge to indicate a connection to the stave (unless the edge of the bone provided the frame). Rune no. 5, **e**, has a distinct circular puncture on its stave. Rune no. 6, **t**, is bent; its branch connects to the stave below the top. The final rune is a large and slightly bent **a**. A few faint curved lines appear near the narrower right end of the bone, separate from the runes. This end is damaged, and some cracks may result from fragmentation, but these look different.

The additional incisions between the first two runes require further assessment. One longer vertical line intersects with **r** and extends down to the edge of the bone. The head and foot of the rune cut through it. Two strokes are visible near the second rune, **a**, and these are linked to each other by a hook in the middle, going around the branch of **a**. The line by **r** may resemble a separate vertical such as **i**, while the second shape looks like a narrow long-branch **s**. Together they could hypothetically present a challenge within the inscription, for instance referring to the **i**-rune by its name *íss* or rendering some other word (e.g. *rís*, "stand up!" or "carve!"). Upon closer inspection, however, it is evident that these markings are connected to each other by a short horizontal groove above, which contradicts the reading **i** and **s**. The lines together form crude rectangular shapes, rather resembling **r**. Based on known strategies of concealed (cryptic) runic writing (Nordby 2013 [2012], 2018), we can test whether turning the bone upside down could reveal alternative identifications. In this case the purpose of the added incisions, however, remains uncertain. If the bone bears a writing sample or an earlier attempt at inscribing, the incisions may be random. Some discussion is nevertheless warranted regarding the potential message of the inscribed bone.

The three first runes, **raþ**, likely stand for *ráð*, the imperative form of the verb *ráða*. Common meanings of the verb in runic inscriptions include "read, interpret". Several Viking Age and medieval inscriptions contain appeals to interpret runes (Nordby 2013 [2012], with literature). Phrases such as *ráð* (*þú*) *rúnar* (*þessar*), "interpret (these) runes!" could express en-

Figure 7. Runic bone FB48323 prior to conservation. Photo and drawing by Kristel Zilmer, Museum of Cultural History. CC BY-SA 4.0.

raþueta
Ráð þú enda(?)! / *Ráð þetta*(?)!

"Interpret the ends(?) [of the bone]!" / "Interpret this(?)!"

tertaining and didactic intentions. Some inscriptions record shorter versions, such as *ráð þat,* "interpret this!". The reading of rune no. 4 as **u** follows its observable traits. It could be considered whether this might be a carving mistake or a failure in planning. If the rune was shaped incorrectly – by accident or on purpose – the intended message may have been **raþþeta**, *ráð þetta* ("interpret this!"), which parallels inscription with *ráð þat*. The sizes of the runes would support a division into two segments, as the first three are somewhat smaller than the last four. However, a presumed carving error is not entirely convincing, and repeating an identical rune would not have been necessary either. An alternative structuring connects **u** with **raþ**, as in *ráð þú* ("(you) interpret!"). The part with **eta** would then provide the object of the activity, for example the accusative form *enda* of the masculine noun *endi/endir* ("end, ending" or "conclusion"), in plural

(of *endir/endi*) or singular (of *endi*).[12] The saying could allude to the end(ing)s of the carved sequence or the bone. *Ráð þú enda* ("Interpret the end(s)!") might relate to the incisions at the start of the inscription or the marks near the other end. If this was to serve as a small puzzle, these elements may have been intentional. Repurposing an item with earlier markings for such a challenge is also possible. Given that the bone is fragmentary, there may also have existed other marked pieces.

The verb *ráða* had multiple meanings, allowing for various interpretations. In an e-mail correspondence from 2022,[13] runologist Magnus Källström suggested as an alternative that **ueta** may relate to *váttr/véttr*, drawing parallels to the expression *ekki vátta* ("nothing, not at all").[14] According to Källström, *ráð vátta* could roughly translate to "plan(?) nothing!". Developing this line of thought further, the message could even be seen as a witty non-invitation, "Interpret nothing!" (or "plan nothing") – a twist to formulations that encourage interpretation. However, we also need to consider the evidence of common sayings and formulae in surviving runic inscriptions, such as the recorded sequences with **raþu** *ráð þú* that combine **raþ** and **u**. This weakens the latter interpretation, despite its appeal as a (joking?) contradiction to customary sayings. This bone probably makes most sense as an invitation to interpret the runes and other markings on it, as also seen in other runic inscriptions.

3.2.3 Runic bone with a name

Part of a rib bone (C64430/156, FB15467) from a smaller animal, such as a sheep or pig, was found in February 2022 in a likely waste deposit with a high organic content. Typical household waste such as animal bones, small everyday objects such as spindle-whorls and jewellery beads, and metal objects were found in this deposit. Dating based on stratigraphy and dendrochronological dating from nearby structures suggests that the layer is from the 1200s; this is also supported by the single pottery fragment found in the layer, a sherd of Rouen-ware, which appears from around 1200. This flat bone is at most 10.4 cm long, 2.1 cm wide and around 0.7 cm thick. Four narrow runes on one side stand to the right of its midpoint, covering around 1.3 cm. The runes are over 2 cm

12. See ONP: https://onp.ku.dk/onp/onp.php?o17946.
13. E-mail from Magnus Källström, 08.05.2022.
14. See ONP: https://onp.ku.dk/onp/onp.php?o88396.

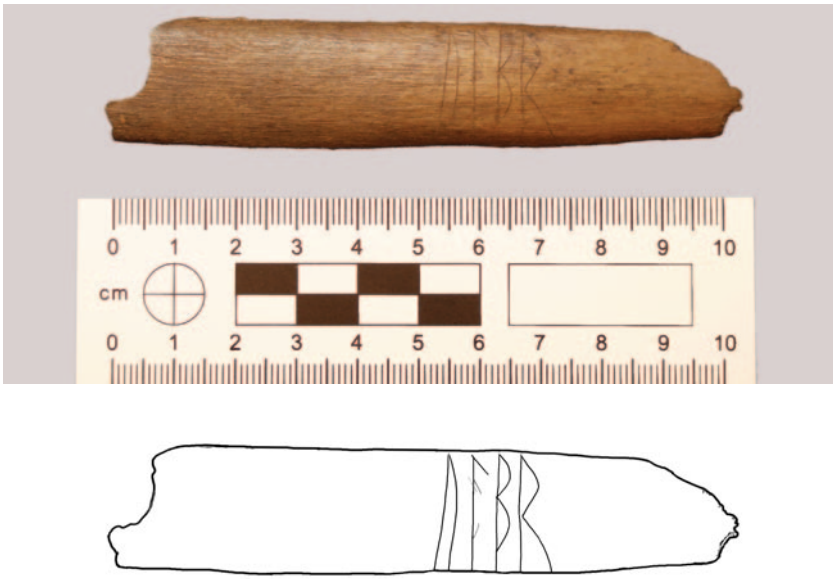

Figure 8. Runic bone FB15467. Photo and drawing by Kristel Zilmer, Museum of Cultural History. CC BY-SA 4.0

ulbr
Ulfr.

"Ulf"

in size. They extend across the bone, even crossing its bottom edge.

Rune no. 1 is a narrow **u**, only a few millimetres wide. Rune no. 2 is read as **l**. Below its diagonal branch (0.4 cm in length), we see another line (0.3 cm) – as though there are two branches. This would suggest a bind-rune: a double **l** or a combination of **l** and **n**. The lower line is, however, fainter. Microscope inspection shows another faint incision and some underlying marks at this spot. Further below, a slight curved line reaches upwards from the stave. These marks may indicate underlying traces or perhaps that the carver started sketching a bind-rune. In the latter case, the intention could have been to merge **l** and **b** (the rune that follows), but this was not completed. The exact purpose of such marks is unknown, and the rune is transliterated as **l**. Rune no. 3, **b**, has two

rounded pockets, with the lower one ending above its base. Rune no. 4, **r**, has a curved head that nears the stave in the mid-section.

Ulfr is a common Old Norse name/naming element (Lind 1905–1915: 1048–1056, 1931: 795–804), corresponding to modern Ulf/Ulv. It features in runic inscriptions from the Viking Age and the medieval period (Peterson 2007: 240–242). Among previous finds, a bone found in 1988 at the site Oslo gate 6 bears the runes **ufr**, possibly the same name (A 317, C37175/G76686, Knirk 1989: 7). The spelling **ulbr** shows that **b** here represents a sound value other than /b/ or /p/, that is either /f/ or a consonantal /u/. This occurs in Viking Age inscriptions and occasionally in the medieval material (Liestøl 1980: 25). A piece of wood from Bergen, for instance, includes the sequence **ulab͡-**, *Ólafr* (N 614, BRM 0/35508). A Greenlandic inscription on a wooden cross gives the name *Þórleifr* as **þurlibr** (GR 9, D10652, Imer 2017: 222–223). Such usage of **b** is usually seen as an archaic feature, but it could also be compared to how the runic ᚴ /p/ could occasionally mark /f/ (Johnsen and Knirk 1990: 110, 231).

3.2.4 Bones with script-like marks

A flat rib bone (C64430/163, F46013), likely from a cow or horse, bears a series of script-like markings. It was found in February 2022, in a layer of waste used to fill in a well or tree-lined pit (possibly used in connection with tanning) after it went out of use. Layer SL42090 consisted primarily of wood chippings, food waste and manure, and is assumed to be deposited after 1420. However, the contents of the layer, including this bone, can be from an earlier date; for example, pottery sherds from 1150–1350 were also present in the layer.

The bone is around 11 cm at its longest, 3.2 cm at its widest and 0.7–0.8 cm at its thickest. A sequence of incisions appears on one side; some are straight, others are angled, and they cover up to around 6.6 cm. The opposite side shows casual cuts and surface marks. The sequence has a script-like flow. The sizes of incisions vary, and the longest spans the surface of the bone. Some lines have sharp contours, others are faint. A few create graphic shapes that resemble runic or other writing. Among distinguishable forms, there is a stave with a diagonal stroke on the left, like **a**. Two angled, connected lines further to the right coincide in shape with V. Turning the bone the other way, these lines create a shape like **u**. Such similarities are likely coincidental, but may be imitations of wri-

Figure 9. Runic bone F46013. Photo and drawing by Kristel Zilmer, Museum of Cultural History. CC BY-SA 4.0.

ting, perhaps inspired by other inscribed bones in towns. Previous finds from Oslo and elsewhere include comparable finds with varied scribbles and markings, for instance A 314 (C37175/G73289), A 315 (C37175/G74630) and A 316 (C37175/G76294) (Knirk 1989: 7).

A second flat animal bone (C64430/163, F552951) has a few faint lines and marks on one side. It was found in July 2022 in a disturbed layer (SL53932) with medieval artefacts that lay partly over modern planks. This bone is at its most c. 10.2 cm long, 2.2 cm wide and around 0.7 cm thick. The clearest incision is a tilted line, and there are other marks nearby, forming a sequence. These can be assessed differently depending on how the bone is turned and which vertical and angular lines are seen as connected to each other. Closer inspection reveals several runic forms like **a**, **þ**, **æ** (**ø**), **a** (or **i/s**), **u** (or **u͡n**/ **n͡u**), and another **þ**. The opposite side of the bone is uneven, with no clear traces of intentional incisions. The bone may show acts of imitating or practising writing, possibly sketching some runes.

Figure 10. Runic bone F552951. Photo and drawing by Kristel Zilmer, Museum of Cultural History. CC BY-SA 4.0.

3.2.5 Bone with a monogram

A sixth inscribed bone (C64430/163, F43508) was found in layer SL41386, a deposit composed of humus and clay, with inclusions of wood chippings, animal bones and typical household waste – including fly eggs. This is likely make-up over a latrine or animal waste layer. Pottery finds provide a broad dating to the Middle Ages. The bone is around 11 cm at its longest and 3.5 cm at its widest, with a thickness of 0.9 cm. Both ends are broken. There is a centrally positioned inscribed motif on one side; random cuts and marks appear elsewhere on the bone, including scratches near the inscription. The opposite side has a few vertical incisions close to one end, with roughly 1 or 1.5 cm gaps in between; a horizontal fracture runs through the bone by this end. Two lines are shorter, two longer; their placement and even spacing may indicate some function, such as measurement or counting.

The inscription seems to merge several graphic elements. There is a stave, around 1.8 cm high. Two angular lines connect to the vertical on

Figure 11. Runic bone F43508. Photo and drawing by Kristel Zilmer, Museum of Cultural History. CC BY-SA 4.0.

the right; one going upwards, the other downwards, forming a shape like the Roman majuscule K /k/ or the runic ᚴ /p/. Another diagonal line runs parallel to the upper branch of the K-shape, touching upon its lower branch, creating the impression of a tilted F. An additional short stroke visually connects the upper branch of K/F to this line. A small rectangular space is thus created, adding an angular pocket to the K-shape. This motif could be a monogram (for instance, combining someone's initials) or a personal mark. Turned sideways, the entire shape resembles a majuscule A, and there are further alternatives to explaining its separate elements, depending on direction and perception. The motif could also be viewed as a K-shape with a connected, uneven cross-like cut by its side. Or it could be a decorative mark where the individually perceptible elements do not necessarily relate to writing. It is of interest to note a possible parallel to the motif on the bone, although from a different period and setting. A decorated bone from Tullycommon, County Clare, Ireland (roughly from the seventh to tenth century) bears ogham-markings on

both sides together with other marks and patterns of lines. A twice incised motif in double contour has a similar composition of K- and cross-shaped lines, judging from accessible drawings (with the usual caveats this entails), although possibly reversed, depending on the viewing direction.[15]

3.2.6 Hairpin with runes

A likely hairpin of antler (C64430/172, FB48800) was found in March 2022 outside building SA49281 in layer SL48181, just north of Clemensallmenningen. Deposit SL48181 was somewhat disturbed by modern activity but had the typical combination of household rubbish and animal faeces that commonly accumulated on medieval Oslo's streets. The findspot makes it tempting to suggest that a resident or user of the building lost their hairpin right outside, but it might equally be waste that was transported from somewhere else in the town and used as make-up for the street construction. Based on pottery and stratigraphy, the layer dates to 1150–1250.

The object has one pointed and one wide end, and there is a small circular hole in the wide end (see p. 124). It is c. 12.4 cm at its longest and 4.1 cm at its widest, with a thickness of around 0.6 cm in the middle section. Its classification as a hairpin is based on the shape and features that compare with other urban finds. The inscription begins near the hole. Six runes of varying size appear on the wide head of the pin, covering around 2.4 cm. The first rune measures around 2.5 cm, the last 1.6 cm. On the same side, a series of tiny strokes form a faint pattern in the surface; this is likely due to external impact when the object was pressed against something that left an impression. The opposite side is rough and uneven, with a few faint incisions.

The runes are mostly clear, although some are casually shaped. Rune no. 1, **k**, has a straight branch. The stave of rune no. 2, **i**, is bent and split in its lower part. This looks accidental, not as an attempt to shape **n**. A separate curved line also runs close to the rune. Rune no. 3, **a**, has a distinct branch on the left, but there is also a faint and shallow imprint on the right that could indicate **æ**. Microscope inspection shows that the marks on the left and right are different and not necessarily linked. The

15. See Forsyth 2024, https://ogham.glasgow.ac.uk/index.php/2024/08/23/feather-marks/.

Figure 12. Runic finds in proximity to Clemensallmenningen, the major thoroughfare excavated on this project. Hairpin FB48800 in the top left. Map by Mark Oldham, NIKU.

Figure 13. Hairpin FB48800. Photo and drawing by Kristel Zilmer, Museum of Cultural History. CC BY-SA 4.0.

kiafae

weaker trace to the right matches other surface marks, such as a longer horizontal line below the runes. The reading **a** follows the clearest features. Rune no. 4, **f**, has relatively straight branches. Rune 5 is another **a**, while the final rune is a short **e**. There appear tiny incisions near the tops of a few staves (see the **a**-runes and **f**). These could indicate draft incisions (rather than dotting).

The inscription may contain a continuous sequence or two segments; **kiafae** can resemble recognisable Old Norse words, for instance the verb *gjafa/gefa* ("give, hand over") or the noun *gæfa* (f. "luck, success, god fortune") or a form of *gjǫf/gjaf* (f. "gift, present"). The segment **kiaf** possibly resembles a naming element, as recorded in the name *Gjaflaug*. The runes **fae** may on their own create associations to repeated formulaic words with varying vowels, such as *fae*, *fao*, *fau*, etc. in amulet inscriptions. One

runic stick from Bergen, for instance, records a text about a remedy against an eye disease (N 633, BRM 0/28202, Liestøl 1980: 63–66), and it bears special signs as part of the sequence **fạ-? fau? fao??**. A wooden amulet from Bergen contains **fai fao fau**, together with parts of the *Ecce crucem Domini* formula, *aea* and *agla* (B 646, BRM 76/12886). A runic stick from Lom stave church features a longer sequence on one side: **fao-faifaufauaonima** (A 71, C34738/150). There is also a fragmentary runic stick from Trondheim with **fao** included in its inscription (N 819, N-20884). One inscription from Nidaros Cathedral records simply **fae (**N 479, Olsen 1960: 48).

The inscription on the hairpin may not have contained a legible message. Possible segments, such as **kiaf** or **fae**, as recognisable from other inscriptions, do not provide a convincing explanation to the entire sequence. The shaping of runes and other casual traces may indicate that the inscription was made to mark and personalise the item to some extent.

3.3 Metal amulet with cryptic runes

The final object is half of a thin circular metal bracteate, possibly of lead, found in March 2022 (C64430/21, F48300). It may have been a personal amulet, perhaps with specially designed runes. The object is slightly bent; it is unknown whether it was broken into half by purpose or accident. The measurements are around 2.9 cm long, 1.5–1.6 cm wide and 0.1 cm thick; the original diameter would have been c. 3 cm. The coin was found in deposit SL48239, a compact silty clay with some humus. The deposit included some wood chippings, hazelnut shells, and relatively few finds – mainly metal and animal bone. The layer is most likely make-up as it lies above burned building timbers that made up a phase of Clemensallmenningen dating to 1160–1220 (Brunstad, Haavik, Oldham and Derrick in prep.).

The markings on both sides look like complex visual ornaments. Some have the appearance of bind-runes, but we may also detect the use of cryptic writing. Some forms are likely cipher runes (an alternative designation by Nordby 2018: 164–166 is 'binary runes') – the identification of a rune then depends on the specific number of branches (hooks, pockets, etc.) on either side of the stave. The way the individual elements on both sides of the amulet have been combined creates associations to symbols that occur in epigraphic and manuscript textual amulets. Some comparable motifs appear on metal plates used as amulets during the Viking

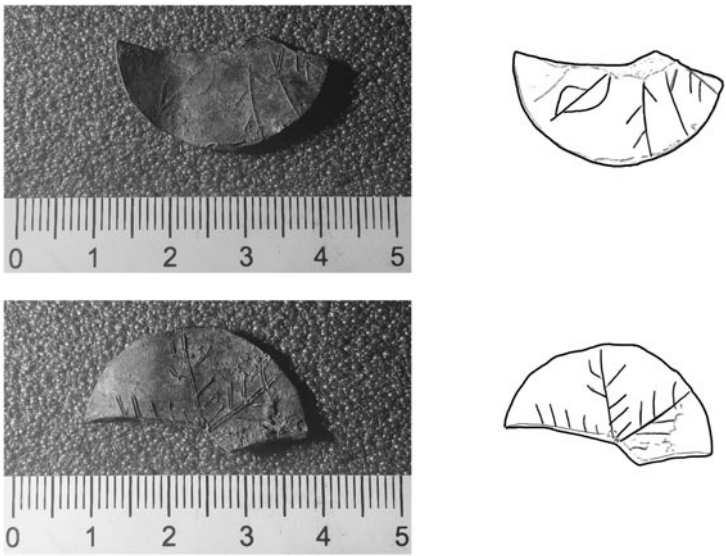

Figure 14. Metal amulet F48300. Photo and drawing by Kristel Zilmer, Museum of Cultural History. CC BY-SA 4.0.

Age and the Middle Ages (on the Viking Age material, see Pereswetoff-Morath 2019). The typical amulets of the medieval period are folded or rolled strips of lead where runes are featured alongside diverse stylised characters and symbols.

Four characters are partially intact on one side, the visible verticals are 1–1.1 cm. Different assessments are possible considering their nature. Assuming most branches point downwards and moving from left to right, we observe the following: The first sign has one round pocket on either side of the stave; the left pocket is positioned lower. This doubled form, with parallels in runic amulets, could be a mirrored version of **þ** or a cipher rune. With one curved branch on each side, the code would be 1/1, i.e. the first group and the first rune corresponding to **t** (groups within the runic alphabet are numbered in the reverse order, with the first group containing the last five runes of the row). The second character has the design of an ordinary bind-rune, with two diagonal strokes on the left and one on the right, combining either **o** and **l** or **o** and **n** (if the stave extended higher). If considered a cipher rune, 2/1 indicates **n** (or 1/2 **b**, if viewed the other way). The third character has no visible marks

on the left unless something was present higher up. It looks most like **k** (an alternative is **f**, but the tightly spaced thin lines more likely show the imprint of the writing tool, perhaps due to its split end). Changing the direction, this rune could be **a**, with a low branch on the left. The final marks by the broken edge are traces of two diagonal lines, which stand to the left of the stave. The preserved portion suggests the reading **o**. If assessed as a cipher rune, the two strokes on the left indicate the second group, with the runes **h**, **n**, **i**, **a**, **s**. When the coin is turned the other way, the group remains uncertain, but the rune would be in the second position (**b**, **n** or **u**). Suggested transliteration options of side A are:

—] **þo͡i̯ḳọ** [— (ordinary runes, with **þ** mirrored);
—] <$^{1}/_{1}$=**t**> <$^{2}/_{1}$=**n**> **ḳ** $^{2}/_{-}$ [— (branches downwards; two identified cipher runes, one ordinary rune, one unidentified cipher rune);
—] $^{-}/_{2}$ **a** <$^{1}/_{2}$=**b**> <$^{1}/_{1}$=**t**> [— (branches upwards; one unidentified cipher rune, one ordinary rune, two identified cipher runes).

On the opposite side, B, there are remnants of staves with multiple branches that can be explained as cipher runes. The staves radiate from a connected mid-point. Moving from left to right, with branches upwards: the first vertical along the broken edge has no branches preserved on the left, but five on the right. This rune would thus have position five in one of the three groups (**y**, **s** or **r**). The second rune has two branches on the left, four on the right – 2/4 gives **a**. The third has three branches on the left, and two clear ones on the right. There is an additional curved mark below, but this does not seem to connect to the stave. The identification is 3/2 **u** (3/3 would give **þ**). A possible transliteration is:

—] $^{-}/_{5}$ <$^{2}/_{4}$=**a**> <$^{3}/_{2}$=**u**> -[—

We find visual parallels to this composition of connected cipher runes among symbols such as the *ægishjálmr*, known from later medieval and early modern Icelandic magic books. This complex ornament has a central point with intersecting lines, which all have attached (crossing) strokes. Similar motifs appear in runic amulet inscriptions. A runic bone found in Tønsberg in 2017 provides an interesting comparison (C61008/53, Holmqvist 2017). Its inscription of five runes is followed by an ornament of three intersecting lines, with two and two branches attached to their

six ends (one has three branches on one side). An important difference is that the ornament on the Oslo amulet is not symmetrical. The three surviving staves (possibly belonging to longer lines) have an alternating number of branches. The fragmentation and other uncertainties make it difficult to establish whether sides A and B used cipher runes throughout, or combined cipher runes and some bind-runes/ordinary runes. The potential message remains unknown. Through comparisons with other amulets, the use of specially designed signs and the circular set-up may be based on known repertoire of amuletic signs.

4 Discussion

Here, we discuss the finds in terms of their inscriptional and material evidence and place them in a comparative cultural-historical context. The combined runological and archaeological focus allows us to consider both the individual find and the broader setting in medieval urban society.

4.1 Inscriptional evidence

In order to highlight the individual and collective significance of the presented finds, we focus on their general, characteristic features as well as distinctive properties, while bringing in relevant parallels among other (urban) runic inscriptions, in particular from Bergen, Trondheim and Tønsberg. Nine of the twelve inscribed objects have identifiable runes or graphic elements linked to runic writing (including cryptic runes), two have markings that resemble runic writing, and one bears a possible monogram/decorative symbol. The inscriptions use the standard 16-character *futhork* with additional characters, such as the dotted runes ᚧ **e**, ᚸ **g** and ᛏ **d**. Two inscriptions use ᚭ **æ**, in addition to ᚨ **a**. One of the runic bones (F7161) has a variant where the diagonal branch crosses the stave but remains short on the right. One long-branch **s** (transliterated as **c**) appears in the word *gratia* on the stick with the *Ave Maria* (F54410). Bind-runes are used in up to four inscriptions (depending on the assessment of the amulet F48300 that also uses cipher runes). The composite mark on one bone (F43508) may show a fusion of graphic elements as a monogram or could be perceived as a decorative motif.

Some carving traits in the shaping of runes could indicate local epigraphic practices, meaning particular ways of practising writing within

groups, but the evidence is limited. We observe that one variant of **m** has its left branch connecting to the stave higher than the right branch (see the sticks F7377, F54410, and one **m** on the label/lid FT44801). The large bone (F7161) has extra branches linked to **m**. The same bone displays a kind of **b** where the pockets do not span the full length of the stave; another case occurs on the bone with the name (FB15467). This type has sometimes been considered as faulty planning (Seim 1982: 8), but the shape could be a deliberate choice. The finds from *Middelalderparken* record varying forms of **r** (curving, angular, open, closed). Such features of variation occur across the medieval corpus; further systematic analyses of the whole Norwegian material are needed to detect possible patterns and overlapping practices.

The extra bows added to two runes on the stick with *Manus Domini* (F7377) may be decorative elements. The same stick has small incisions by the tops of a few runes. Similar marks appear by stave tops on a few other items, perhaps traces of drafting. Clear separator marks are recorded in three inscriptions. The stick with *Manus Domini* has five marks on side B, each consisting of two incisions (one at the end is damaged). The stick with the *Ave Maria* (F54410) has two marks of several aligned cuts, one is partly damaged. The wooden object that repeats *á mik* (FT44801) has a single mark separating its two parts. Some incisions may indicate where an inscription begins, although there also occur casual cuts (compare the bone F7161 and the wooden tag FT42413). The bone that invites interpretation (FB48323) has additional incisions of unknown purpose between the first two runes. These diverse markings, including incidental traces and external impact, offer some clues about how people interacted with such objects. Some show how one may have tested the surface or the carving implement, while others hint at drafting, imitation or repurposing of the items.

The presented transliterations and interpretations are to a certain degree uncertain and ambiguous, partly due to lacking insight into linguistic and extra-linguistic (situational) contexts. Some inscriptions may have been purposefully ambiguous, expressing individual creativity, learning and entertainment. The inscriptions reveal a range of purposes – practical, didactic, magico-religious, and perhaps even entertaining, as we also see from previously known runic objects in Scandinavian medieval towns. There are evident parallels with known text- and object-types in the overall runic corpus. The bone with **ulbr**, *Ulfr* (FB15467), for

example, is a naming inscription, as customary on various inscribed items. Naming inscriptions can document ownership or serve as casual personal graffiti or practice pieces where people recorded something they knew how to write. This bone might be an example of the latter – unless it was meant as a humorous label of a livestock bone, since the meaning of the word *ulfr* is "wolf".

On the wooden tag (FT42413), the name *Ásbjǫrn* stands alongside *á mik* ("owns me"). This is another familiar text- and object-type, especially thanks to the evidence from Bergen (see recently Magin 2023) and Trondheim (e.g. Hagland 1990 [1986]; Knirk and Hagland forth.). Wooden tags with runes shed light on mercantile activities, as do sticks that contain messages about trade and goods. The Oslo corpus has had few finds of tags with such characteristic content and form, and the same applies to Tønsberg. One early find, from 1926 at Sørenga, is a tag with the name *Arnfinnr*, Arnfinn (N 20, C23924). Another example, found in 1974 in the plot known as *Søndre felt*, preserves three runes **otr** (A 119, C34182/G18855). A round stave was found in 1970 at *Mindets tomt*, with the words: *Rikarðr á mik*, "Rikard owns me" (A 31, C33270/G1065). A more recent discovery from the Follo Line excavations at Bispegata (2017), is a fragmentary stick with a pointed end and a few readable runes, a likely owner's tag (C60964/81, F22301, see Holmqvist 2018). The tag from *Middelalderparken* is a valuable addition to this collection. Similarly to the many finds in Bergen and Trondheim, the point was thus to assert that some items belonged to Asbjørn. Ownership statements can otherwise express varying intentions, depending on objects and use. A wooden wax tablet from Oslo bears the words *Benediktus á* ("Benedictus owns"), and the start of the *futhork* (A 35, C33448/G5879); during a recent inspection, a third sequence was detected, with four probable runes. The type of object suggests that these were writing samples, possibly including a note about the owner/user of the tablet.

The repeated *á mik* on another item (FT44801) opens for different contextual considerations. Without the personal name (which has not survived or may never have been there), it appears as a practical statement, perhaps related to the crafting or repurposing of the item. Varying purposes, from decoration to scribbling, may be relevant for the hairpin (FB48800) – a functional object with added writing. The runic sequence may be a random expression of someone's encounter with writing. The

meaning of **kiafae** is uncertain, although **fae** in isolation may create associations to formulaic words.

Writing samples, practice and entertainment possibly underlie other inscriptions. Texts that invite their expected recipient(s) to interpret runes are well known. The bone with **raþueta** (FB48323) might state "Interpret the end(s)!" or "Interpret this!". Not all such tasks were challenging to those with some understanding of runes. Inscriptions saying "interpret this"/interpret (these) runes" were recreating common sayings and expectations. Shared customs and playfulness might explain the runic bone (F7161) with **basmarþærbæin**. Presented interpretations include designating the item as someone's bone or a description of someone being hospitable. If the first part contains a person's name, the intention may have been to inform who was using (carving) the bone. Inscribing runes on livestock bones, which were easily turned into writing material, may have had a socially engaging role, perhaps related to a shared meal.

Two sticks cite common Latin prayers. *Ave Maria gratia* (F54410) renders a central prayer in Christian devotion and learning (Knirk 1998; Kleivane 2018). The prayer appears on medieval wooden sticks and everyday items, such as food and drinking vessels, church walls, grave monuments, liturgical objects, personal accessories, and amulets. The records vary in length (discussed in Zilmer 2013). Several runic sticks with the *Ave Maria* are preserved in the Bergen collection, including one fuller rendering (N 617, BRM 0/69064, see Liestøl 1980: 32–34). A stick from Tønsberg also has a longer version (A 63, C33968/TG 1602, Gosling 1989).

The second stick (F7377) combines Latin and vernacular phrases (on biscriptual and bilingual inscriptions, see Palumbo 2023, with literature). Blending or combining scripts or linguistic repertoires occurs across a variety of materials, including monumental and mundane artefacts. The Oslo find accords well with the known material from Bergen where we have several sticks that cite religious or poetic texts in Latin. Some combine expressions in two languages. One stick, for instance, quotes Old Norse skaldic poetry alongside the popular phrase from Virgil, *Omnia vincit Amor, et nos cedamus Amori* ("Love conquers all, so let us too yield to love", B 145, BRM 0/4146). The message on the Oslo stick is religious, while the functions of the inscribed item raise some questions. Such inscriptions reflect acts of personal devotion and praying. Some inscribed objects could also be linked to the custom of making protective

or healing amulets. Records of familiar religious formulae – produced from memory or based on existing models – may further attest to learning. Some sticks could function as visual aids or model texts. In the case of the stick with *Manus Domini*, the included personal name in the meantime emphasises the significance of the religious message for the named individual.

Finally, we have inscriptions that do not feature clearly identifiable markings or comprehensible texts – another common phenomenon in medieval runic writing culture (more on this in Zilmer 2020). The bones with script-like markings include recognisable (runic) elements, imitating the flow of writing. Different marks are a form of self-expression and communication, adding layers of meaning to the objects. The visual design is a further feature of interest, also including diverse graphic elements, such as monograms, bind-runes and cryptic runes. These could function both as recognisable signs and visual ornaments.

On the level of inscriptional evidence, these finds thus show familiar features and patterns, and at the same time provide examples of individual solutions and uses. This does not only apply to the selection of finds discussed here but is a useful perspective in any discussions of the medieval runic material. There always occur expressions of both overarching traditions and individuality. We can, on the one hand, spot evidence of ownership and mercantile activities, modes of communication in Christian society, or widespread practical literacy habits. On the other hand, we find traces of local epigraphic expressions, personal faith and individual scribblings. The hybrid nature of rune-inscribed objects is further illuminated by considering their properties as material evidence.

4.2 Material evidence

The Oslo corpus is the third largest urban collection of runic writing on small, portable items from Norwegian medieval towns. Whittled sticks, shaped pieces of wood, and broken bits of animal bones are characteristic objects of the medieval runic writing culture. They illustrate the diversities of writing practices through form, content, purpose and context. They show how epigraphic and material cultures interacted, and how writing and other modes of expression met in the hands of inventive people. Aslak Liestøl (1974: 21) described runic sticks as having a form that was intentional, made for the purpose of writing. A useful approach, which underlies our assessments of the individual objects, is found in

Franklin (2004 [2002]). He distinguished between primary writing (related to items made for or suited for writing and gaining their meaning from writing), secondary writing (items that have other primary functions but also bear writing), and tertiary writing, such as graffiti (writing serves as an added layer, a supplement to various material supports). The objects from *Middelalderparken* offer samples of primary and secondary writing, but also reveal inherent ambiguities, much like other, previously discussed urban runic corpora, for example from medieval Bergen (see e.g. Zilmer 2020). Pieces of wood and fragments of bone as material writing supports served to express varying content. The sticks with religious messages, for instance, gained significance as demonstrations of private faith; the bones with names or other descriptive labels expressed different practical customs. Items exhibiting secondary writing had their own primary functions, and possibly extended purposes thanks to the incorporated writing. Tags, for example, were made to have distinctive shapes and content; their form could help to identify owners, as did the recorded names. Functional objects, such as tools and utensils, could gain adapted functions from writing and other markings.

Another aspect of material culture that is clearly inherent in runic artefacts is their ability to switch between primary and secondary layers of significance (Olsen 1997: 180). Not everything can be easily separated into practical or symbolic objects – everything can be a sign or symbol and be part of a cognitive system (even things that end up thrown in the rubbish). Some objects illuminate formal and visual ambiguities, especially in terms of their hypothetical reception. While some individuals may have primarily experienced their inscribed layers as visual symbols or decoration to material items, others may have had pre-existing understanding of concepts that could fill these compositions with layers of meaning (being able to decode, at least partly, their use of cryptic writing or other strategies of expression). The objects in themselves could make sense in various ways, which we can no longer detect.

One interesting theoretical lens through which to consider runic artefacts is Lévi-Strauss's notion of *bricolage*. Lévi-Strauss writes (2021 [1962]: 21):

> The *bricoleur* is adept at performing a large number of diverse tasks, but unlike the engineer, he does not subordinate each one to the availability of raw materials and tools designed and acquired to fit his project. His universe of

> instruments is closed, and the rule of his game is always to make do with 'whatever is at hand' – that is to say, a set of tools and materials that is finite at each moment, as well as heterogenous, because the composition of the set is not related to the current project, nor indeed to any given project, but is the contingent result of all the occasions that have presented themselves for renewing or enriching his stock, or for maintaining it with leftovers from earlier constructions and destructions.

This concept has been adapted to many fields of enquiry (Webster 2019: 2), including archaeology, and puts at its centre the idea of opportunism and making do with whatever is at hand: "*Bricolage* is the act of using and adapting existing elements in a fresh way" (Tilley 1991: 96). For the medieval rune-inscriber, animal bones and bits of wood would have been very much at hand. Wood was the primary building material in Oslo, both for houses and urban infrastructure, and for items large and small, from boats to household items – and not least as fuel. Animals were common, as both livestock on urban smallholdings and foodstuffs from farms outside the city. The waste deposits in which these runic artefacts have been detected contain hundreds more of the same types of artefacts – just without runes. Some objects, particularly the inscribed bones, the broken weaving shuttle, and others, are suggestive of this making do with what is at hand. The acts of naming or labelling items in a playful manner seem to reflect social situations where bones were turned into handy media of communication.

As Soar and Tremlett have noted (2017: 428): "*Bricolage* ... constitutes a theory of production that does not privilege the author, artist or artisan but rather the *ad hoc* combinations and re-combinations that disclose the fluidities – as opposed to essences – of culture." Bricolage has thus an element of casualness about it, being both opportunistic (Webster 2019: 2) and a mode of recycling and reusing. The tools and materials available are always finite, and the repertoire is hence contingent on what is available (Conkey and Fisher 2020: 517). This finite repertoire includes skills and experiences – perhaps, for example, work with butchery gave someone a predisposition to use bone, either through availability, familiarity, or the accessibility of appropriate tools? Conkey and Fisher (2020: 520), in their discussion of bricolage, state that, "Agency, as archaeologists have come to appreciate, is of interest, yet here is something that involves the recognition of the role of the unintentional, imperfect consequences, and

that agency is enacted situationally and in interpersonal contexts". This describes the runic corpus – and the finds from *Middelalderparken* – appropriately: we see imperfect results, such as aborted inscriptions, unintentionality through what we might call doodling on food waste, situatedness in the form of artefacts and inscriptions that have distinct meaning in certain contexts (such as ownership markers), and interpersonality through, for example, the religious pronouncements.

The act of bricolage creates newness from existing fragments (Webster 2019: 3), drawing on existing skills and competencies, and blending different elements. The creation of runic items is exactly this: They are given new, extended or altered meanings through their inscription, and are hybrid expressions of textual and material culture, highlighting skills of literacy in a broad sense. The rune-inscriber as bricoleur transforms otherwise residual objects – animal bones, sticks, etc. – into new things with new meanings, as Antczak and Beaudry recognise (2019: 90):

> Since things are only gatherings of materials in motion, they can also become some-thing else. Solid material things are often reused, re-mended, reconstituted and reassembled into new and often hybrid things ... These qualities that many things possess also mean that they can complicate, layer and unravel linear time and many of them can be seen as constituting palimpsests.

Runic artefacts are an important type of archaeological find, in that they show how material culture is "that sector of our physical environment that we modify through culturally determined behaviors" (Deetz 1974: 24). Runic artefacts, through being inscribed, are overt examples of behaviours, habits and human engagements in the past. However, this is not to say that this makes them easy to interpret or to place within the medieval mindscape. As Deetz has remarked, "common sense is culturally relative" (ibid.: 23) – what may seem like an obvious interpretation of both the text and the action of inscribing the object for us today, may seem ridiculous for those who made such inscriptions all those centuries ago.

5 Concluding thoughts

The runological-archaeological assessment of twelve inscribed items from the area of *Middelalderparken* in Oslo has highlighted their impor-

tance as written and material evidence. Each new addition to the corpus of medieval inscriptions is significant, viewed on its own and in relation to the previously known material. The objects provide evidence of activities that were taking place within the medieval town. Importantly, the runic artefacts cannot solely be understood as text, and nor can they solely be understood as objects; they are hybrid things, and as such we need hybrid approaches for understanding them and their stories about the past. Insights into uses of script and language are combined with those that guide attentions towards skills, habits and practices of turning particular objects and materials into writing supports. Runological and archaeological thinking and other multi-disciplinary considerations complement each other in an important manner. This is particularly relevant regarding urban artefacts of writing that have become known thanks to archaeological excavations and investigations of Scandinavian medieval towns. Archaeology has been described as 'a discipline of traces' (Crossland 2021: 87), while epigraphy, the study of inscriptions, deals with the remains of written expression and media that existed within different cultural horizons. Runic artefacts are a clear example of complex interactions, as the residues of actions, habits, modes of self-expression and communication with others – traces of humanness that outlive the inscribers. These new finds shed further light onto life in medieval Oslo through both their materiality and their epigraphic content, as objects that were imbued with additional meaning through inscription.

Bibliography

A + number = preliminary registration number in the Runic Archives of the University of Oslo, of the runic inscriptions found in Norway (except Bryggen, Bergen).

Alvestad, Jenny, Michael Derrick and Mark Oldham. Forthcoming. *Fjerning av tidligere gangbro over Klypen.* NIKU Rapport 351.

Andersen, Kasper H., Jeppe Büchert Netterström, Lisbeth Imer, Bjørn Poulsen and Rikke Steenholt Olesen, eds. 2021. *Urban Literacy in the Nordic Middle Ages.* Utrecht Studies of Medieval Literacy 53. Turnhout: Brepols.

Antczak, Konrad A. and Mary C. Beaudry. 2019. Assemblages of practice. A conceptual framework for exploring human-thing

relations in archaeology. *Archaeological Dialogues* 26, 87–110.

B + number = preliminary registration number in the Runic Archives of the University of Oslo, of the runic inscriptions found in the Bryggen area in Bergen.

Barnes, Michael. 2012. *Runes: A Handbook*. Woodbridge: Boydell.

—. 2013. What is runology and where does it stand today? *Futhark: International Journal for Runic Studies* 4, 7–30.

Bauer, Egil Lindhart, Stefka G. Eriksen, Håvard Hegdal, Morten Stige and Sara Langvik Berge, eds. 2024. *Det gamle Oslo 1000–1624*. Oslo: Cappelen Damm Akademisk.

Berge, Sara Langvik, Kristine Ødeby Haugan, Khalil Olsen Holmen, Line Hovd, Michael Derrick and Magnus Helstad (in prep.) *Arkeologisk utgravning i Bispegata: Bispeborgen, Bispeallmenningen og bosetninger fra førurban tid, middelalder og nyere tid i Oslo.* NIKU Rapport 109/2018.

Blennow, Anna and Alessandro Palumbo. 2021. At the crossroads between script cultures: The runic and Latin epigraphic areas of Västergötland. In: *The Meaning of Media: Texts and Materiality in Medieval Scandinavia*, eds. Karl G. Johansson and Anna Catharina Horn, 39–70. Berlin: de Gruyter.

Bollaert, Johan. 2022. *Visuality and Literacy in the Medieval Epigraphy of Norway*. Doktoravhandling, Institutt for lingvistiske og nordiske studier, Universitetet i Oslo.

Brunstad, Stine Urke, Mark Oldham, Aksel Haavik and Michael Derrick. Forthcoming. *Arkeologiske undersøkelser i Middelalderparken: Reetablering av terreng, Middelalderparken Oslo – Del 1.* NIKU Rapport 350.

Cleasby, Richard and Gudbrand Vigfusson [Guðbrandur Vigfússon]. 1874. *Old Norse / Old Icelandic Dictionary*. Online version: https://cleasby-vigfusson-dictionary.vercel.app/ (10.02.2025).

Conkey, Margaret W. and Roy A. Fisher. 2020. The return of the bricoleur? Emplotment, intentionality, and tradition in palaeolithic art. *Journal of Archaeological Method and Theory* 27, 511–525.

Crossland, Zoë. 2021. 'Contextual archaeology' revisited. Reflections on archaeology, assemblages and semiotics. In: *Far from Equilibrium. An Archaeology of Energy, Life and Humanity*, eds. Michael J. Boyd and Roger C.P. Doonan, pp. 85–102. Oxford: Oxbow.

Danske Runeindskrifter. University of Copenhagen. http://runer.ku.dk/ (07.02.2025).

Deetz, James. 1974. *In Small Things Forgotten: The Archaeology of Early American Life*. Garden City NY: Anchor Press/Doubleday.

Dictionary of Old Norse Prose. University of Copenhagen. https://onp.ku.dk/onp/onp.php (07.02.2025).

Düwel, Klaus and Robert Nedoma. 2023. *Runenkunde.* Stuttgart: J.B. Metzler.

Edman, Therese Marie, Håvard Hegdal and Aksel Haavik (in prep.) *Follobaneprosjektet F03 og F04: «Arkeologigropa». Gamlebyen, Oslo*. Norsk institutt for kulturminneforskning.

Franklin, Simon. 2004 [2002]. *Writing, Society and Culture in Early Rus, c. 950–1300*. Cambridge: Cambridge University Press.

Forsyth, Katherine. 2024. Feather-marks. Ogham: Harnessing digital technologies to transform understanding of ogham writing, from the 4th century to the 21st. https://ogham.glasgow.ac.uk/index.php/2024/08/23/feather-marks/ (04.05.2025).

Gosling, Kevin. 1989. The runic material from Tønsberg. *Universitetets Oldsaksamling, Årbok* 1986–1988, 175–187.

Gustavson, Helmer. 1994a. Latin and runes in Scandinavian runic inscriptions. In: *Runische Schriftkultur in kontinental-skandinavischer und -angelsächsischer Wechselbezienhung*, ed. Klaus Düwel, 313–327. ERGA 10. Berlin: de Gruyter.

—. 1994b. Runsk latinitet. In: *Medeltida skrift- och språkkultur. Nio föreläsningar från ett symposium i Stockholm våren 1992*, ed. Inger Lindell, 61–77. Runica et Mediævalia. Opuscula 2. Stockholm: Sällskapet Runica et Mediævalia.

Gustavson, Helmer, Thorgunn Snædal and Magnus Källström, eds. *Gotlands runinskrifter* 3. http://www.raa.se/kulturarvet/arkeologi-fornlamningar-och-fynd/runstenar/digitala-sveriges-runinskrifter/gotlands-runinskrifter-3/ (07.02.2025).

Hagland, Jan Ragnar. 1990. [1986]. *Runefunna. Ei kjelde til handelshistoria.* Fortiden i Trondheim bygrunn: Folkebibliotekstomten. Meddelelser 8. Trondheim: Riksantikvaren.

Hagland, Jan Ragnar and James E. Knirk. Forthcoming. *Norges Innskrifter med de yngre Runer 7*. [see preliminary manuscript by Hagland, *Runer frå utgravingane i Trondheim bygrunn 1971–94. Med eit tillegg av nyfunne innskrifter elles frå byen (N774–N894)*

https://ivar.folk.ntnu.no/filer/Hagland1997-Trondheimsruner.pdf] (07.02.2025).

Haugan, Kristine Ødeby, Karen Langsholt Holmqvist and Kristel Zilmer. 2024. Runer og runeinnskrifter. In: *Det gamle Oslo 1000–1624*, eds. Egil Lindhart Bauer et. al., 416–419. Oslo: Cappelen Damm Akademisk.

Helstad, Magnus and Øystein Dahle. 2020. *Arkeologisk utgraving Klypen Vest. Området vest for Klypen, Oslo.* NIKU Rapport 40/2015.

Herteig, Asbjørn E. 1969. Kongers havn og handels sete. Fra de arkeologiske undersøkelser på Bryggen i Bergen 1955–68. Oslo: Aschehoug.

Holmqvist, Karen Langsholt. 2017. Innskrift på beinbit fra Anders Madsens gate 3, Tønsberg. Funnrapport 13.12.2017, NIKU, Oslo.

—. 2018. Merkepinne med runeinnskrift. Funnrapport 30.08.2018, NIKU, Oslo.

—. 2021. *Carving the Self: Portrayals of the Self in Medieval Textual Graffiti from Norway and Connected Territories*, Doktoravhandling, Institutt for lingvistiske og nordiske studier, Universitetet i Oslo & NIKU.

Haavik, Aksel and Håvard Hegdal. 2020. Follobanen 2015. Områdene nord for Bispegata. Gamlebyen, Oslo. NIKU Rapport 102.

Imer, Lisbeth. 2017. *Peasants and Prayers. The Inscriptions of Norse Greenland*. Publications from the National Museum 25. Odense: University Press of Southern Denmark.

Johnsen, Ingrid Sanness and James E. Knirk, ed. 1990. *Norges Innskrifter med de yngre Runer* 6/2. *Bryggen i Bergen*. Oslo: Norsk Historisk Kjeldeskrift-Institutt.

Kleivane, Elise. 2018. Epigraphic *Ave Maria* as evidence of medieval literacy. In: *Epigraphy in an Intermedial Context*, eds. Alessia Bauer, Elise Kleivane and Terje Spurkland, 101–122. Dublin: Four Courts Press.

—. 2020. Christian knowledge in late medieval Norway. In: *Faith and Knowledge in Late Medieval and Early Modern Scandinavia*, eds. Karoline Kjesrud and Mikael Males, 213–242. Turnhout: Brepols.

—. 2021. Roman-script epigraphy in Norwegian towns. In: *Urban Literacy in the Nordic Middle Ages*, ed. Kasper H. Andersen et al, 105–134. USML 53. Turnhout: Brepols.

Knirk, James E. 1989. Arbeidet ved Runearkivet, Oslo. *Nytt om runer* 4, 6–8.

—. 1998. Runic inscriptions containing Latin in Norway. In: *Runeninschriften als Quellen interdisziplinärer Forschung: Abhandlungen des Vierten Internationalen Symposiums über Runen und Runeninschriften in Göttingen vom 4.-9. August 1995*, ed. Klaus Düwel, 476–507. ERGA 15. Berlin: Walter de Gruyter.

—. 2022 [2021]. Corpus editions of Norwegian runic inscriptions. *Futhark: International Journal of Runic Studies 12*, 29–48, https://doi.org/10.33063/diva-491877.

Lévi-Strauss, Claude. 2021 [1962]. *Wild Thought.* Chicago and London: University of Chicago Press.

Liestøl, Aslak. 1960. Skålvoll (Grinni kirke). In: *Norges Innskrifter med de yngre Runer* 5. ed. Magnus Olsen, 18–22. Oslo: Norsk Historisk Kjeldeskrift-Institutt

—. 1964. *Runer frå Bryggen*. Bergen: Det midlertidige bryggemuseum.

—. 1968. Correspondence in runes. *Mediaeval Scandinavia* 1, 17–27.

—. 1974. Runic voices from towns of ancient Norway. *Scandinavica. An International Journal of Scandinavian Studies* 13/1, 19–33.

—. 1977. Runeinnskriftene fra Mindets tomt. In: *De arkeologiske utgravninger i Gamlebyen, Oslo. Bind 1: Feltet 'Mindets tomt'*, eds. Helge I. Høeg et al, 214–224. Oslo: Universitetsforlaget.

Liestøl, Aslak, ed. 1980. *Norges Innskrifter med de yngre Runer* 6/1. *Bryggen i Bergen.* Oslo: Norsk Historisk Kjeldeskrift-Institutt.

Liestøl, Aslak and Svein Nestor. 1987. Runeinnskrifter. In: *De arkeologiske utgravninger i Gamlebyen, Oslo. Bind 3: 'Søndre felt'*, ed. Erik Schia, 423–432. Øvre Ervik: Alvheim & Eide.

Lind, Erik Henrik. 1905–1915. *Norsk-isländska dopnamn ock fingerade namn från medeltiden*. Uppsala: Lundequistska Bokhandeln.

—. 1920–1921. *Norsk-isländska personbinamn från medeltiden, samlade och utgivna med förklaringar*. Uppsala: Lundequistska bokhandeln.

—. 1931. *Norsk-isländska dopnamn ock fingerade namn från medeltiden: supplementband*. Oslo: J. Dybwad.

MacLeod, Mindy. 2002. *Bind-runes. An Investigation of Ligatures in Runic Epigraphy*. Runrön 15. Uppsala: Uppsala universitet.

Magin, Elisabeth. 2023. *Data-based Runes. Macrostudies on the Bryggen Runic Inscriptions*. The Bryggen Papers 10. Bergen: University of Bergen. https://doi.org/10.15845/bryggen.v100

Molaug, Petter B., ed. 2002. *Strategisk instituttprogram 1996–2001. Norske middelalderbyer*. NIKU Publikasjoner 117, 1–91. Oslo: NIKU.

Molaug, Petter B. 2015. From the Farm of Oslo to the Townyard of Miklagard. In: *Nordic Middle Ages – Artefacts, Landscapes and Society. Essays in Honour of Ingvild Øye on her 70th Birthday*, eds. Irene Baug, Janick Larsen and Sigrid Samset Mygland, 213–226. University of Bergen Archaeological Series 8. Bergen: Universitetet i Bergen.

Nielsen, Michael Lerche, Marie Stoklund and Klaus Düwel. 2001. Neue Runenfunde aus Schleswig und Starigrad/Oldenburg. In: *Von Thorsberg nach Schleswig: Sprache und Schriftlichkeit eines Grenzgebietes im Wandel eines Jahrtausends*, eds. Klaus Düwel, Edith Marold and Christiane Zimmermann, 208–237. ERGA 25. Berlin: Walter de Gruyter.

Nordby, K. Jonas. 2013 [2012]. '*Ráð þat*, if you can!', *Futhark: International Journal of Runic Studies* 3, 81–88.

—. 2018. *Lønnruner. Kryptografi i runeinnskrifter fra vikingtid og middelalder*. Doktoravhandling. Institutt for lingvistiske og nordiske studier, Universitetet i Oslo. http://urn.nb.no/URN:NBN:no-69539.

Nordlie, Erlend, Aksel Haavik and Håvard Hegdal 2020. Follobanen 2015. Områdene sør for Bispegata. Gamlebyen, Oslo. NIKU Rapport 103.

Norges Innskrifter med de yngre Runer 1–6. 1941–1990, eds. Magnus Olsen, Aslak Liestøl, Ingrid Sanness Johnsen and James Knirk. Oslo: Norsk historisk Kjeldeskrift-Institutt.

Nytt om runer (1986–2014), https://www.duo.uio.no/handle/10852/37667 (13.02.2025).

Olesen, Rikke Steenholt. 2007. *Fra biarghrúnar til Ave sanctissima Maria: studier i danske runeindskrifter fra middelalderen*. Doktoravhandling, Det humanistiske fakultet, Københavns universitet.

—. 2021. Medieval runic Latin in an urban perspective. In: *Urban Literacy in the Nordic Middle Ages*, eds. Kasper H. Andersen et al, 69–103. USML 53. Brepols: Turnhout.

Olsen, Bjørnar. 1997. *Fra ting til tekst: Teoretisk perspektiv i arkeologisk forskning*. Oslo: Universitetsforlaget.

Olsen, Magnus, ed. 1957. *Norges Innskrifter med de yngre Runer* 4. Oslo: Norsk Historisk Kjeldeskrift-Institutt.

Palumbo, Alessandro. 2022. How Latin is runic Latin? Thoughts on the influence of Latin writing on medieval runic orthography. In: *Studien zur runischen Graphematik: Methodische Ansätze und digitale*

Umsetzung, eds. Edith Marold and Christiane Zimmermann, 177–218. Runrön 25. Uppsala: Uppsala universitet.

—. 2023. Analysing bilingualism and biscriptality in medieval Scandinavian epigraphic sources: a sociolinguistic approach. *Journal of Historical Sociolinguistics* 9/1, 69–96. https://doi.org/10.1515/jhsl-2022-0006.

Peterson, Lena. 2007. *Nordiskt runnamslexikon*. Uppsala: Institutet för språk och folkminnen, Uppsala universitet.

Pereswetoff-Morath, Sofia. 2019. *Viking-Age Runic Plates: Readings and Interpretations*. Runrön 21/1, Acta academiae regiae Gustavi Adolphi 155. Uppsala: Uppsala universitet.

Runor. Digital forskningsplattform: https://app.raa.se/open/runor/search (07.02.2025).

Sand, Lise Maren Lereim. 2010. *Runer i et arkeologisk perspektiv*. Unpublished master's thesis, Institutt for arkeologi, konservering og historie, Universitetet i Oslo. https://www.duo.uio.no/handle/10852/23054.

Seim, Karin Fjellhammer. 1982. *Grafematisk analyse av en del runeinnskrifter fra Bryggen i Bergen*. Unpublished cand. philol. thesis, Nordisk Institutt, Universitetet i Bergen.

Seip, Didrik Arup. 1955. *Norsk språkhistorie til omkring 1370*. Oslo: Aschehoug.

Soar, Katy and Paul-François Tremlett. 2017. Protest objects: *bricolage*, performance and counter-archaeology. *World Archaeology* 49/3, 423–434.

Spurkland, Terje. 2005. *Norwegian Runes and Runic Inscriptions*. Woodbridge: Boydell.

Tilley, Christopher. 1991. *Material Culture and Text: The Art of Ambiguity.* London: Routledge.

Webster, Gary. 2019. Bricolage: A novel archaeological perspective on complex materialities. *Préhistoires Méditerranéennes* 7.

Wilster-Hansen, Birgit, David C. Mannes, Karen L. Holmqvist, Kristine Ødeby and Hartmut Kutzke. 2022. Virtual unwrapping of the *BISPEGATA amulet*, a multiple folded medieval lead amulet, by using neutron tomography. *Archaeometry* 64 (4): 969–978. https://doi.org/10.1111/arcm.12734 (02.02.2025)

Zilmer, Kristel. 2013. Christian prayers and invocations in Scandinavian runic inscriptions from the Viking Age and the Middle Ages. *Futhark: International Journal of Runic Studies* 4, 129–171.

—. 2020. Runic sticks and other inscribed objects from medieval Bergen: challenges and possibilities. *Maal og Minne* 112/1, 65–101.
—. 2021. '*Fann ek bein* ..., I found a bone ...': Runic artefacts as material signs of writing in medieval Norwegian towns. In: *Urban Literacy in the Nordic Middle Ages*, eds. Kasper H. Andersen et al, 135–171. USML 53. Turnhout: Brepols.
Ødeby (Haugan), Kristine. 2020. Hvor er runene? *Fornvännen* 115, 15–28.

Norsk sammendrag

I 2021–2022 avdekket arkeologer fra Norsk institutt for kulturminneforskning (NIKU) tolv små gjenstander med runeinnskrifter eller runelignende tegn under en utgravning i Oslo. Utgravningen var knyttet til utviklingen av Middelalderparken i Oslos gamleby og inngikk i omfattende arkeologiske prosjekter i forbindelse med utbygging av Follobanen fra Oslo til Ski. Artikkelen drøfter runefunnene og funnkonteksten runologisk og arkeologisk. Gjenstandene er fra omtrent 1150–1350, og innskriftene varierer fra enkelttegn til lengre meningsgivende tekster på norrønt og latin. Artikkelen belyser runefunnene som skriftlige og materielle kilder ut fra en tilnærming som framhever deres betydning som sammensatte gjenstander.

Kristel Zilmer
Museum of Cultural History
University of Oslo
Postboks 6762 St. Olavs plass
NO-0130 Oslo
kristel.zilmer@khm.uio.no

Mark Oldham
Norwegian Institute for Cultural Heritage Research
Postboks 736 Sentrum
NO-0105 Oslo
mark.oldham@niku.no