

RESEARCH ARTICLE

Runes and Rye: Administration in Denmark and the Emergence of the Younger Futhark, 500–800

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Abstract

In this article, I take up the case of runic writing to reflect upon James Scott's view of the nexus between writing and various forms of domination in early states, especially the use of literacy for taxation in cereal-growing societies. Scott's theses provide interesting matter "to think with," even when his grasp of historical detail has been found wanting. It is not controversial to grant Scott that cuneiform writing was a remarkable tool for statecraft, and exploitation, in the first states of Mesopotamia, around 3500 BC. The same is true of writing in other early states. But in the first states of Scandinavia, particularly Denmark ca. AD 500–800, writing had a more troubled relationship with the state. No evidence survives that runic writing was used to administer taxation or much else, as it was in other agrarian civilisations. It is true that the runic script was used to commemorate kings, most famously by Haraldr Blátǫnn (r. ca. 958–ca. 986.). But, statistically speaking, it was more often used to aggrandize the sort of local big men who usually resisted centralized power. In this article, I survey the relationship between runic writing and administration. I consider what the Danish situation suggests about the relationship between states and writing and offer a tentative hypothesis of a short-lived attempt at runic bureaucracy around 800, which created—and quickly lost control of—a shortened variety of the runic script (the Younger Futhark).

Keywords: Administration; bureaucracy; cereals; Denmark; literacy; Old Norse; runes; state formation; Viking Age; writing

In the historiography of literacy, the Scandinavian rune-carver of, say, AD 800, and the Mesopotamian bureaucrat, around 3000 BC, make an unlikely pair. Our Sumerian—later Akkadian or a clutch of other Near Eastern languages—scribes stand at the beginning of the story of writing.¹ As the primary occupations of these scribes included duties such as collecting taxes, redistributing resources, and resettling enslaved peoples,² they have cut sinister figures in some political histories. This is especially true of the theories of James Scott, to whose work much

¹Fischer 2001, 32–35; Kaestle 1985, 14–15; Ong 1982, 83–84.

²Postgate 2013; Visicato 2000.

of this paper will respond.³ Such opinions present the implication that, wherever writing and the state have co-existed, the two have been intimately related, often in exploitative ways. Early writing is presumed to be primarily for regulation and coercion. As Neil MacGregor pithily puts it, “Only later does writing move from rations to emotions; the accountants got there long before the poets.”⁴

Our rune-carver—for the purposes of this paper working in Old Norse though also in other Germanic languages—understandably enjoys less of the scholarly spotlight. Histories of literacy tend to ignore runic inscriptions altogether. Runes can scarcely compete with the position of cuneiform at the birth of writing. Similarly, while the Mesopotamian bureaucrat has become a bogeyman for certain critics of the state, the rune-carver has gone almost unnoticed by political thinkers. It is true that histories of the Viking Age (ca. AD 750–1050) or the Scandinavian kingdoms use the Jelling Stones (DR 41, ca. 958; DR 42, ca. 950)⁵ as an important point in *national* politics.⁶ Nonetheless, the *universalizing* intellectual tendency that eagerly seizes on the Mesopotamian tablet generally leaves the Scandinavian runestone untouched. The only exceptions I know are the passing comments first by Frederick Engels and later by Gilles Deleuze and Félix Guattari. Both Engels and Deleuze and Guattari speak breathlessly of runic writing, because, in their view, unlike other script cultures it emanates more from individuals than the state, though they lacked space to expand on the implications of their observation.⁷

In what follows, I will examine the use of runic literacy in Early Viking Age administration, particularly statecraft in Denmark before around 800. It has been proposed that “runic literacy” is better called “runacy,” as literacy in runes tended to be restricted to relatively terse statements, often with great idiosyncrasy in orthography, while literacy in Latin letters could cover longer matters in prose.⁸ However, this distinction is not important for our present purpose. Because our sources are sparse, I will use comparative material from both later periods in Scandinavian history and general models of writing in early states, which tend to draw on Bronze Age Mesopotamia. Having reviewed the evidence for administration, I will conclude with some additions to Moltke’s theory that the emergence of the shortened runic alphabet known as the Younger Futhark should be attributed to a state actor. I admit freely that little of what I will propose can be known for certain. That said, in the historiography of the Viking Age the difference between the impression of fact and necessary conjecture has more to do with the assertiveness of one’s voice than historical acumen. The bold fact-slinger and the timid “what-iffier” are generally working from the same body of evidence, which is extremely limited compared to later periods.

³Scott 2017, esp. 140–49, 157–66; 2009, 23–24. See also, for example, Zerzan 2012, 11; Rose 2010, 223; Earl Fehr 1993, 8–10.

⁴MacGregor 2012, 78.

⁵Runic inscriptions are cited by their signum in the *Samnordisk runtextdatabas*. Runes were surveyed chiefly using a digital method, Rundata 3.1. Available here: <https://www.nordiska.uu.se/forskn/samnord.htm/> (last accessed 19 May 2021). Danish runic inscriptions are also usually accessible at <https://runer.ku.dk> but at the time of writing this has been offline for two months. For an overview of different dates of the Jelling stones, see Stoklund 2006a, 366. On Jelling and methods of dating, see Imer 2014, 165–68.

⁶Arup 1961, 114–16; Sawyer 1988, 23; Roesdahl 1998, 67.

⁷Deleuze and Guattari 2004, 443–44; Engels 1972, 203.

⁸Spurkland 2004, 342–44.

Scott's Model of Writing and Coercion in Early States, and Its Applicability in Scandinavia

James Scott's oeuvre provides a departure point for this article, especially his recent *Against the Grain*. Scott argues forcefully for the oppressive role of literacy in early states. His novel contribution is that writing and political coercion are dialectically encouraged by the cultivation of cereals as an economic base. "...why have no 'lentil states,' chickpea states, taro states, sago states, breadfruit states, yam states, cassava states, potato states, peanut states, or banana states appeared in the historical record?" he asks.⁹ The answer, he maintains, is that cereals produce crops that are (1) clearly visible to tax inspectors, and (2) can be harvested, transported long distances, and stored with relatively little worry about spoilage. This is not true of crops which produce their carbohydrates underground, like tubers, or hide their carbohydrates under foliage, like legumes.

Once the state sees cereals—something it can measure, extract, and redistribute in the form of rations—it needs a technology to oversee the process. That technology is writing, and so the bureaucrat is born. Their power is underwritten by the armed overseer or soldier, whose beer and porridge rations come out of the same grain that the bureaucrat administers. Beginning with counting sheaves of grain, the bureaucrat quickly develops a glyphic repertoire to administer other resources, and indeed to administer other human beings, either by moving about slaves or through issuing written orders and communiques to his fellow bureaucrats. This is why, Scott reasons, early writing tended to be pictographic or logo-syllabic: "Neither in China nor in Mesopotamia was writing originally devised as a means of representing speech."¹⁰ It was originally devised to do things with cereals and do things with people who could be fed with processed forms of those cereals, either beer, bread or porridge.¹¹

The early states of the fertile crescent were obviously different to the early states of Scandinavia. Mesopotamian polities were essentially city states, and later networks of cities. A walled city governed a rural hinterland. Urban settlements in Scandinavia, from about 500–800, were limited to trading emporia. In places such as Ribe in Denmark and Birka in Sweden, the great and the good lived in townhouses only during the peak commercial seasons.¹² It has been suggested, on the basis of later, post-Viking Age parishes, that conurbations such as Århus and Hedeby may have exercised extractive power over their hinterlands, but this is speculative.¹³ The basic social unit in Scandinavia prior to about 800 was not the city but the farmstead, called in runic inscriptions a *býr*.¹⁴ It appears that the term could describe independent smallholdings, farmsteads that were part of manors, and perhaps manors

⁹Scott 2017, 129.

¹⁰Ibid., 145.

¹¹On the utilitarian inspiration of writing more generally, see Postgate, Wang, and Wilkinson 1995.

¹² Foote and Wilson 1979, 145; Skre 2008.

¹³Randsborg 1980, 57–58.

¹⁴In this article, I use an Old Danish orthography for concepts or quotations from runic inscriptions of the Viking Age, intended to be recognizable both to users of standardized Old Norse and runologists (e.g., <ý> not <ȝ> for /y:/, <ǰ> not consonantal <i>, <e> to represent /ɛ/, <æ> retained to mark the minimal pair of <e> vs. <æ> in later Old Icelandic, the dialect which forms the basis of standardized Old Norse). The letter R <ᚱ> in its final position normally denotes a historical transition from the Common Germanic suffix -az to -r <R>, probably something like modern Czech ř. I use standardized Old Norse orthography for quotations from the

themselves,¹⁵ although the extent of manorialism in the Viking Age has been debated.¹⁶

The first states in Mesopotamia and the first states in Scandinavia differed greatly in form and durability. Indeed, political power in the north was so diffuse and limited in geographic reach that some have questioned whether one can speak of “states” at all before at least 950–1000. Should we not rather speak of “big men” of the type that Marshall Sahlins famously identified in Melanesia.¹⁷ The Norwegian debate over state formation has been particularly indicative of how Sahlins’s typology might shape discussion of the Viking Age.¹⁸ Sverre Bagge argued that, prior to the High Middle Ages, Norway was a “pre-state society” (*førstatlig samfunn*) of Sahlinsian big men.¹⁹ Some twenty years later, an outcrop of articles responded by taking up the question of how great the powers of Norwegian rulers of the 900s were.²⁰ If their authority was too extensive, Knut Helle thought, they represented “the state” rather than “the big man.”²¹ It was countered that, even as late as King Óláfr Haraldsson (r. 1015–1028), the regent was still little more than a big man if he “joined supporters to himself by dint of charisma and generosity, but lost power when the resources ran dry ... [and] had no institutionalised power based on compelled offerings” (*knyttet tilhengere til seg ved hjelp avkarisma og generøsitet, men som mistet makten når ressursene tok slutt [og] ikke hadde noen institusjonalisert makt, basert på tvungne ytelser*).²² The debate raged on for some time, gradually ceasing to cite Sahlins as it perambulated the familiar stomping ground of Norwegian historians: the search for the origins of Norway.

For Sahlins, both the Melanesian big man and the Polynesian chieftain were often in tension with “the state.” For example, “Polynesian paramounts seemed inclined to might ‘eat the power of the government too much’”; that is to say, extract too much from their subjects and thereby provoke revolt which “proves the chieftom’s undoing.”²³ But I find this tension not to be intrinsic, and in some iterations (such as the debate between Bagge and Helle) to be chimeral. There are varying definitions of “the state,” but most strike similar chords. Weber notably called the state “the only human *Gemeinschaft* which lays claim to the monopoly on the legitimated use of physical force,” though he admitted his definition was not suited for the premodern era.²⁴ Tilly is more transhistorical: “Let us define states as coercion-wielding organizations that are distinct from households and kinship groups and exercise clear priority in some respects over all other organizations within substantial territories.”²⁵ Speaking in the context of Viking Age Denmark, Randsborg opts

sagas, following their editions. Texts in dialects of Middle Danish or other High Medieval East Norse varieties likewise retain the orthography of their editions.

¹⁵Jesch 2011, 36–37.

¹⁶Poulsen and Sindbæk 2011.

¹⁷Sahlins 1963.

¹⁸A thoughtful and lucid bibliography of the big man in a wider Scandinavian setting is provided by Barreiro 2010.

¹⁹Bagge 1986.

²⁰In addition to those cited below, see Orning 2014; and Bagge 2015.

²¹Helle 2009, esp. 606–7.

²²Bagge 2002, 201.

²³Sahlins 1963, 297–99.

²⁴Weber 2015, 136.

²⁵Tilly 1992, 1–3.

simply for “a large, stable political unit with a high level of production.”²⁶ Expanding on Engels’s definition, which admits Weber’s, Tilly’s, and Randsborg’s, I define “the state” as a superstructure which (1) persists over more than one generation; (2) encompasses the territory of more than one family; and (3) is capable of exercising control over the products of labor and the activities of the people within its borders.²⁷ Sometimes, as Sahlins found, the big man may threaten such a state. But if a big man establishes control over an area, directs its production, and his instruments of power survive him, then according to the definitions given above, he has *made himself the state* without necessarily losing his “bigmanliness.” Put coarsely, a hairy Viking with a menacing sword arm may well make himself and his offspring a *de facto* state for a few generations. That their state might be extremely small (say, a particular peninsula or valley) should not distract us from its denizens’ experience of being subjected to stately power. Periods of statelessness or state collapse certainly occur, but very often there is a state to be found even in conditions which appear chaotic and fragmented. There is nearly always the presence of a strongest, wisest, or most ruthless person who exercises and consolidates authority. Less regularly, that person creates political structures that outlive them.

According to these criteria, it was probably in Denmark where the first Scandinavian states emerged, and they did so haltingly. Compared to Norway and Sweden, with their steep fjords, fast-flowing rivers, vast forests, mountain ridges, and enormous geographic scale, Denmark was relatively flat and easy to traverse: a more appealing canvas for those who would build states than could be found in Fennoscandia, with easier communication and more arable land.²⁸ Still, the cohesion of Danish states was labored. An individual might achieve a monopoly on power over a wide geographical area for a while and be acknowledged by foreign powers as *rex Danorum* “king of the Danes”—only for more than one person to present themselves in the following year using the same title. For example, according to the *Royal Frankish Annals*, a Danish king named Hemmingus (ON Hęmningr) seems to have inherited a fairly stable kingdom from Godofridus (ON Guðrøðr?) in the year 810.²⁹ But by 812 the kingdom had become some sort of *biumvirate* under the kings Herioldus (ON Klakk-Haraldr) and Reginfridus (ON Ragnarr?) following a civil war.³⁰ Two factions, loyalists and usurpers, then continued to attack each other until 821. To demonstrate how fluid Early Danish power structures could be, we should note that this Klakk-Haraldr, called a king of Denmark by our Latin annalist, is described by the Icelandic historian Snorri Sturluson (d. 1241) using the title *konungr af Jótlandi*, “King of Jutland.”³¹ One eccentric saga calls the same man only “*jarl einn er rēð fyrir Hollsetulandi*,” “a certain earl who ruled over Holstein.”³²

²⁶Randsborg 1980, 7.

²⁷Engels 1972, 227–37.

²⁸Foote and Wilson 1979, 8–9, 36–40. On the challenges of geography for state formation, see Scott 2009, 20–32. Note that “Denmark,” “Norway,” and “Sweden” are used roughly here. Medieval Denmark included much of what today is southern Sweden, and Danish rulers were exercising power in the Vik region of Norway from an early date.

²⁹*Annales Regni Francorum inde ab a. 741 usque AD a. 829* (1895), 133.

³⁰*Ibid.*, 136.

³¹Snorri Sturluson 1941, 89.

³²*Jómsvikinga saga* 2018, 5.

Early Mesopotamian states generally disappeared either because they were conquered by other states, became deurbanized owing to ecological changes, or were pillaged by nomads.³³ Early Danish states simply collapsed back into the primordial goo of squabbling big men whence they came. Too many kings meant there was soon no king at all. As the *Roskilde Chronicle* (ca. 1140s) puts it:

Reges dico, quia tunc temporis multi fuerunt reges in Dania. Nam, ut [fuerunt] duo aliquando in Iucia, in Fyunia tercius, in Selandia. IIIItus., in Scania Vtus.; aliquando duo per totam Daniam; aliquando eciam unus per totam Daniam; aliquando unus per totam Angliam simul et Daniam, ut post docebimus.³⁴

I say kings, because in those days [ca. 900] there were multiple kings in Denmark. Indeed, there were sometimes two in Jutland, sometimes a third in Funen, sometimes a fourth in Zealand, in Scania a fifth. Sometimes there were two over all of Denmark. Sometimes there was one over all of Denmark. Sometimes there was one over all of England and Denmark and the same time, as we shall tell of later.

We lack space to intrude on the debate about the valences of “Denmark” or “Danishness” in Viking Age statecraft.³⁵ For our purposes, it is important only to stress that when I speak of a “Danish state” in the period around 800 and earlier I mean only “a state within the borders of today’s Denmark.” These states need not have controlled all of Denmark, though some probably did. Some of these states may well have characterized themselves as Danish or of the Danes. Others perhaps thought of themselves using identities which today are regional, such as Jutish,³⁶ or were uninterested in ethnic designations at all. For example, the vikings who raided Nantes in 843 are called in Latin *Westfaldingi*, “People of Vestfold”; that is, a regional rather than a national identity such as “Norwegians.”³⁷ As late as 1157, “Denmark” could be dismantled into Lego-like constituent kingdoms. Saxo Grammaticus (d. ca. 1220) wrote that Valdemar the Great:

...decreta trifariam totius regni orbem partitus, Iutie magnitudinem, non minus incolarum multitudine quam spacious abundantem, in unam portionem secreuit, in altera Sialandium ac Fioniam, in tertia Scaniem cum attentibus prouinciis locauit.³⁸

divided the whole compass of the realm into three: as one portion he partitioned off the whole extent of Jutland, as abundant in its number of inhabitants as in its wide expanses; Zealand and Funen comprised another, while his third allocation contained Scania and its adjoining regions.

³³Ur 2010.

³⁴*Chronicon Roskildense et Chronicon Lethrense* 1917, 16.

³⁵Gazzoli 2011; Lund 1991.

³⁶Arup 1961, 115.

³⁷*Chronicon Aquitanicum* 1829, 253. One annalist considered Vestfold part of a Danish Kingdom in 813 (*Annales Regni Francorum inde ab a. 741 usque AD a. 829, 1895, 138*).

³⁸Saxo Grammaticus 2015, 1086–87.

If Scandinavia and Mesopotamia in their respective periods had quite different political histories, there was also a noteworthy difference in terms of the history of literacy. The people who devised cuneiform worked from a *tabula rasa*, save for some pictographic proto-writing.³⁹ But by the time that states started to emerge in Denmark, about, say, AD 500 if we assume that the earliest portions of the Danevirke fortifications were the work of a state, alphabetic writing had existed for at least two thousand years, following the invention of the Canaanite alphabet ca. 1800–1500 BC.⁴⁰ Moreover, at that time alphabetic writing had been known to Germanic-speaking populations for at least six centuries. The Vimose comb, excavated on Fyn, features the Common Germanic word *harja*, which either meant “comb” or a man’s name, in the Elder Futhark script.⁴¹ It dates from about AD 160. Still earlier, the Negau Helmet may show a Germanic name or noun phrase written in Etruscan script, probably from about 200 BC.⁴² In Scandinavia, early states did not invent writing; it predated them, or, to speak figuratively, writing was reclining in the field and the state was built around it. Furthermore, that writing was not logo-syllabic, but alphabetic. Alphabets certainly can be used for administration; the bureaucratic landscape of the modern West is not hindered because it is not expressed in hieroglyphs. But alphabetic scripts are not tailor-made for administration in the same way that logo-syllabic scripts are.

Taxable Carbohydrates in Denmark

If Scott’s model is viable, none of the differences outlined above ought to affect its applicability to Scandinavia. Denmark in Late Antiquity and the Viking Age must have been “a cereal society” of the type which, Scott says, encourages exploitation and bureaucracy. Animal husbandry was also widely practiced, and milk was an important foodstuff, having been so since Antiquity.⁴³ But this was obviously not a society that kept most of its calories “on the hoof,” as did the Turkic peoples of Central Asia. Viking Age breads and other baked goods have been excavated and they contain barley, oats, wheat, and some rye.⁴⁴ Occasionally loaves were made using peas, a legume that resists state inspection, according to Scott’s typology.⁴⁵ This was apparently a marginal trend, though, and in any case some barley or wheat would have been required to make pea bread cohere. The Vikings were not hiding most of their calorific wealth under the ground or behind leaves. Precisely which cereal was the major source of carbohydrates in Viking Age Denmark has been debated. Bread alone cannot solve the problem because grain was also regularly consumed as porridge. In order to be preserved directly in the archaeological record, grain normally needs to be carbonized through accidental burning.⁴⁶ This means that

³⁹Dahl 2012.

⁴⁰Tummscheit and Witte 2018, 70–71; see also Christensen 1977, 28–35; Hedeager 2002, 369–71; Näsman 2006.

⁴¹Stoklund 2006b.

⁴²Nedoma 2002; cf. Must 1957.

⁴³Arup 1961, 19–20; Porsmose 1988, 291–98.

⁴⁴Price 2020, 118.

⁴⁵Foote and Wilson 1979, 166.

⁴⁶Robinson, Mikkelsen, and Malmros 2009, 117.

grains that are usually malted, for example barley, get overrepresented. Rye, which was normally not malted, is thus largely absent from surveys that look for carbonized grain.

However, one study considers both rare unburnt plant remains, in barns and latrines, including parts of the plant other than the germ, and impressions left by grains in ceramics. It suggests that by the Viking Age, rye constituted at least half and, in some areas, upwards of 70 percent of cereal consumption in Denmark.⁴⁷ The rest was hulled barley (*hordeum vulgare* var. *vulgare*). As an aside, the same study indicated that naked barley (*hordeum vulgare* cf. var. *nudum*), more labor intensive and more flavorful than hulled, was a staple until around the first century BC, but that it declined in popularity throughout the same period that states started to emerge in Denmark during the Germanic Iron Age and disappeared entirely during the Viking Age. Was this because the farmsteads of the pre-Roman Iron Age were consuming the overwhelming majority of the cereals they produced, and were therefore incentivized to produce a more luxurious grain for their own enjoyment? Or was it perhaps because starting around 500 farmers increasingly saw their surpluses extracted by the elite, encouraging them to produce a “quick and dirty” yield?⁴⁸ These are questions for another time. The important detail we have established here is that the agrarian landscape in Denmark was ripe for exploitation by a canny state. We will return to the issue of how able Early Danish states were to exploit their denizens. For now, it suffices to note that, if Scott is right, we should expect some form of bureaucratic organization. What might that have looked like?

A Typology of Administrative Labor

I define administration as any intellectual labor which is intended to make possible another, more important project. Bureaucracy is therefore a particular subset of administration, where administrators are psychologically alienated from the objects of their labor. Therefore, all bureaucracy is administration, but not all administration is bureaucracy. Happily, for present purposes this distinction is unimportant, and my arguments remain intact even if one considers “administrator” and “bureaucrat” to be synonymous. Although “administration” might be considered, in passing, to be one discrete use of runic literacy, compared to memorialization, graffiti, and so forth, we will need to be more detailed.⁴⁹ The administrator can have one of three functions:

- (1) *Assessment*: An administrator is essentially counting things, such as sheaves of grain, cattle, or slaves. This generates written documents that are generally no more than lists, usually but not always with numbers.
- (2) *Certification*: An administrator issues documents that can be used to prove that a given act or transaction has been completed, or that a certain communication is legitimate. This produces writing such as witnesses to oaths or receipts, which tend to be short and formulaic.

⁴⁷Ibid., 130.

⁴⁸See also Randsborg 1982, 209–10.

⁴⁹Hines 1997, 83.

(3) *Correspondence*: An administrator sends documents to other administrators, giving orders, posing inquiries, or providing updates. Of all the administrator's activities, this tends to produce the longest and most varied prose.

That runic script was used for administration is sometimes stated as obvious.⁵⁰ Let us re-evaluate the sources for assessment and correspondence. Space prevents our considering evidence for certification here, but it has been demonstrated that it often took place without the use of writing, for example by messengers displaying tokens of authenticity such as rings and staves.⁵¹ The runic artefacts of the Viking Age that have survived into our own time reveal nothing of assessment or certification, and precious little of correspondence. But the physical technology existed to perform these functions (the mental technology, we shall see, is a different matter). Short messages that could be carried by messengers were conveyed on pieces of wood called *rúnakefli*. High Medieval sagas such as *Hákonar saga Hákonarsonar* (ca. 1264) and *Íslendinga saga* (1270s) depict these *rúnakefli* being used by both kings and in interpersonal communication during the 1200s. A trove of some 670 inscriptions dating from the 1100s through to the 1300s, many of them *rúnakefli*, was uncovered at Bryggen in Bergen, Norway. These contained merchants' tags, letters between traders, as well as personal correspondence, including several love messages.⁵² A famous scene in Rimbert's *Vita Anskarii* (ca. 870) depicts King Bjørn at Haugi dispatching a message: *Peracto itaque apud eos altero dimidio anno, praefati servi Dei cum certo suae legationis experimento et cum litteris regia manu more ipsorum deformatis ad serenissimum reversi sunt augustum*; "And so, as they neared the end of the second half of the year, the aforementioned servants of God, with trustworthy tokens of the embassy and with the deformed letters of the royal hands, as was their custom, returned to the most blessed emperor [Louis the Pious, r. 813–840]."⁵³ This is often interpreted to mean that King Bjørn sent a *rúnakefli* to the Carolingian emperor, although it could plausibly be a reference to broken Latin.⁵⁴ The wooden *rúnakefli*, with letters carved by knife, would have been more time-consuming to produce than a Mesopotamian tablet pressed into wet clay with a stylus, but equally portable, transmissible, and cheap to produce.

Correspondence in Runes Prior to ca. 800

There is no shortage of High Medieval runic correspondence, albeit mostly between non-bureaucrats. But are there any artefacts from Viking Age Denmark which show *rúnakefli* being used in ways analogous to Mesopotamian tablets? To my knowledge, seven Danish *rúnakefli* survive that plausibly predate 1050. Of these, three are gibberish (DR EM85;356 [DK NJY 53], DR EM85;371A [Sl 8, also known as the first Haddeby Stick], DR DKS;98). One is an "I wuz here" doodle (DR AUD1997;264, DK S;32). One is a curse, apparently intended to provoke diarrhea (DR Schl3). One is either a spell or a love letter (DR EM85;350). Only one is, to my mind, unambiguously

⁵⁰Liestøl 1971, 76–78; Moltke 1976, 69; Randsborg 1980, 25.

⁵¹Liestøl 1981.

⁵²For state of the art, see Zilmer 2020.

⁵³Rimbert 1884, 33.

⁵⁴Liestøl 1971, 74; 1982, 459; Roesdahl 1998, 49.

intended as correspondence: DR EM85;371B [Sl 9], also known as the 2nd Haddeby Stick. It is probably from the ninth century. My reading is as follows, though there are others:⁵⁵

§A *raþi ' utlfr ' utufr ' sati ' auriki ' itarku ' in ' aurik ' salti ' utlfi ' utur*
 §B *auþikr ' bion fur ' uk ' þat ' fu : suiarþ : -lt ' ul--li : kafibu : at : ualr ' okiu :*
likr ÷

§C ... : nu : suiarþ : ilt

§A *Ráði Oddulfr*. Oddulfr sændi Øriki í targu, en Ørik sældi Oddulfi Oddr.

§B *úþekkr Björn* fyr hogg þat fyr swerð [il]lt ql--li [?] *Gefiðu* at valr engjuligr

§C ... nú swerð illt.

§A Let Oddulfr interpret this. Oddulfr sent Ørikr into the shield [as a shield?] and Oddr handed over [or sold?] Ørikr to Oddulfr

§B Wretched Björn, because of that blow because of that bad sword May you make it so that death to nothing else ...

§C ... now the bad sword

The opening appellation *Ráði Oddulfr* “Let Oddulfr interpret this” marks the second Haddeby Stick as a letter, although the rest of the details are murky.⁵⁶ The first line may witness a man named Ørikr being sent as a hostage by Oddulfr, or perhaps sold on as a slave, and Oddr giving an affidavit that he originally sold or sent Ørikr to Oddulfr. If Ørikr was a slave, it would make sense that a record of his sale was important. Medieval Scandinavian law codes which apparently contain older, Viking Age jurisprudence show that someone selling a slave was liable in some circumstances even after the sale. Under the Old Gutnish law, *Law of the Gotlanders* (ca. 1220), if a recently purchased slave developed health problems, the slave’s previous owner was responsible, for a month in cases of epilepsy or incontinence, and up to a year for leg problems, probably meaning knee injuries.⁵⁷ The Old Swedish *Law of the East Geats* (ca. 1290) demands witnesses for the sale of a slave, and compares the transaction to those of *kuika þæn, sum horn ok huf hauer*; “living things that have horns and hooves.”⁵⁸ The *rúnakefli* may have been reused, so the first line need not be congruent with the other two. The second and third lines mention *swerð illt*, “a bad sword.” Liestøl interprets this as an eyebrow-wiggling reference to a penis, but I am inclined to think, along the lines of Freud, that sometimes a bad sword is just a bad sword.⁵⁹ Did *úþekkr Björn*, “Wretched Björn,” sell Oddr a defective weapon? Perhaps this was a letter of complaint, or an agreement of compensation.

⁵⁵Kabell 1977; Liestøl 1971, 71–73; Moltke 1976, 371–73. As far as I know, I am the only person who interprets *utur* as Oddr. I understand Oddr (nominative) as the subject of *selja*, Ørikr as the direct object (accusative), and Oddulfr as the indirect object (dative).

⁵⁶Salutatory formulae based around the verb *ráða* are mocked in a High Medieval Inscription, N B434: *Jón Silkiþuð á mik, en Guðormr Fuðsleikir reist mik, en Jón Fuðkula ræðr mik*; “Jón Silky cunt owns me, and Guðormr Cuntlicker carved me, and Jón Cuntbollocks is interpreting me [right now].” The inscription also parodies the other common formulae, “x owns me,” “x carved me.” On the ludic qualities of *ráða*, see Nordby 2013.

⁵⁷*Guta Lag* 2009, 60–61.

⁵⁸*Östgötalagen* 1895, 174.

⁵⁹Liestøl 1971, 73.

Either way, the second Haddeby Stick testifies to the suitability of the *rúnakefli* for correspondence in Denmark during the Viking Age.⁶⁰ But the only way to read this as a state document is to assume that none of the named parties was the carver, and that, instead, the carver was a state-employed scrivener. This is an unnecessary level of complexity, since the *ráði* formula of the inscription otherwise resembles later medieval inscriptions between two individuals without the involvement of any state intercessor (Vg Fv1992;172, N 13M, N 111M, N 169M, N 352M, N 393M, N 408M, N 473M, N 485M, N 575M, N B65M, N B325M, N B434M, N B584M). This is correspondence, yes, but between persons acting in a private capacity. A survey of preserved runic finds reveals no examples of state correspondence from the Viking Age. However, runic correspondence seems to have been a technology known widely enough that it would be strange if the state never deployed it. The poor durability of wood and the inherent ephemerality of most correspondence means little has survived. Circumstances such as the supposed message of King Björn at Haugi, and the High Medieval saga tradition, also suggest that state correspondence once existed but is now lost.

Bad Maths: The Challenges of Assessment Using Runes

Evidence for bureaucrats corresponding, then, is limited to second-hand accounts and comparative cases. What of assessment? Interestingly, the runic script is, uniquely, poorly suited for this purpose, for the simple reason that, unlike every other script that I know of, it has no numerals. Certain modern scripts like Cherokee or Vai borrowed Arabic numerals after native numerals failed to gain traction, but they still have some way of denoting numbers. Runes cannot even do that. True, some Swedish manuscripts of the 1500s feature pentadic numbers, particularly in runic calendars, but those must be an expression of contrived antiquarianism.⁶¹ It is implausible that the pentadic numbers were known across Scandinavia for nearly a millennium and then were only accidentally preserved in Early Modern Sweden. The numbers in Ole Worm's *Computus Runicus* (1626, allegedly an apograph of an MS from 1328) look suspiciously like Greek and Hebrew numerals, where $\Psi = 1$, $\Omega = 2$, $\Phi = 3$, just as $\aleph/\alpha = 1$, $\beth/\beta = 2$, $\daleth/\gamma = 3$, and so forth.⁶² This is exactly what one might expect from a Renaissance Humanist of 1626 whose enthusiasm got the better of him. Runic calendars are sometimes discovered incised on wooden staves, but exclusively in Swedish-speaking regions, and again overwhelmingly from the Early Modern period.⁶³ Even the oldest example, the Nyköping Stick from the 1200s, appears to be an attempt to nativize computus, not an expression of Viking Age mathematics.⁶⁴ In sum, there is no reason to suppose the use of runic numerals was known in the early Danish state. Three Norwegian inscriptions—N 573M, N A39M, and N B46M—all from the High Middle Ages, abbreviate letters to denote numbers, but this a completely unworkable principle for mathematics; in Old Norse it cannot, for

⁶⁰Barnes 2012, 88–89.

⁶¹Kroman 1982, 120–21.

⁶²Ole Worm, 25. Frustratingly, it has been impossible to consult the standard edition and I have had to rely on facsimiles from the internet.

⁶³Jansson 1981, 495.

⁶⁴Svärdström 1966.

example, distinguish between one and eleven, or two, ten, and twenty, or four and five. Here is N 573M:

æt þ f f s s a n t æ t þ f f s s a n t

ę[inn] t[veir] þ[rír] fl[jór] fl[imm] s[ex] s[jau] á[tta] n[íu] t[íu] ę[llefu] t[ólf]
þ[rítján] fl[jórtán] fl[immtán] s[extán] s[jautján] á[ttján] n[íttján] t[uttugr]

one two three four five six seven eight nine ten eleven twelve thirteen fourteen
fifteen sixteen seventeen eighteen nineteen twenty

The normal way to denote numbers in runic script of the Viking Age is to write out the entire number in prose. For example, this Swedish runestone, Vg 4:

**utr : skalt : raisti : stain : þinsi : aftir : þurstain : sun : sin : auk : stain:bru :
karþi : (f)(i)(r)(i)(r) : (i)(s) : (a)(t)(i) : (þ)ria : buia : i : homri · auk : þria :
tiauku : marka : at : airiki**

Oddr Skáld reisti stein þennsi eftir Þorsteín, sun sinn, ok steinbro gerði fyrir. Es átti þrjá býja í hamri ok þrjá tíugu marka at Eiríki.

Oddr the Poet erected this stone and made a stone bridge in memory of Þorsteinn, his son. He owned three farmsteads in Hamarr and thirty marks [a share of land?] with Eiríkr.

For an assessor, this is a most unwieldy system, especially considering what a slow method of inscription a *rúnakefli* was. In defense of the runic script's mathematical suitability, we should note that the early Danish state probably did not have to assess as much as, say, Babylon or Sumer. It has been argued that the states in Denmark from roughly 500 to 900 operated under the "tributary mode of production," in between the slave-based production of antiquity and the feudalism of the Middle Ages proper.⁶⁵ Rulers extracted surpluses from middlemen, who extracted them from lower farmers, who in turn extracted the labor of cottagers and slaves. So far, so feudal, but in a tributary system these surpluses were thought of more as "gifts" than "taxes," and in many situations they may not have been exactly quantified. Arup theorized that the Jutish kings from 500 onward had incomes restricted to externally rendered tributes, for example from the Frisians and Abodrites, taxes from Hedeby, and then income from crown land in Jutland.⁶⁶ He viewed this as an impressive achievement, though personal taxation and feudal dues are conspicuous by their absence in his model. Poulsen convincingly expanded on the details of these sorts of tributes prior to the year 1000 on numismatic grounds.⁶⁷ Some have argued for a still-more-extractive Danish state. Sawyer described a system not too distant from textbook Blochian feudalism.⁶⁸ Randsborg thought of Denmark in the 800s as "a loosely knit society, fragile on the level of integration, but stable on a local level owing to a self-sufficient economy."⁶⁹ He supposed some form of support to towns from their hinterlands, and also described a

⁶⁵Poulsen and Sindbæk 2011, 13–14; Wickham 2005, 366–74.

⁶⁶Arup 1961, 115.

⁶⁷Poulsen 2012, esp. 53–59.

⁶⁸Sawyer 1988, 168–89.

⁶⁹Randsborg 1980, 10.

fairly well-developed officialdom.⁷⁰ This is not the venue to solve the problem of how sophisticated administration by the early Danish state was. It may have been as extensive as royal reeves acting as de facto tax collectors out on the countryside in crown lands. That is to say, some people growing food might have dealt with administrators face-to-face. Administration may have been as minimal as a small clique who received goods at treasuries and granaries around Jelling. We will have to permit ourselves to be agnostic.

Nonetheless, we cannot yet exorcise the specter of Scott's putative administrator, organizing grain and other resources. Even if early Danish states were substantially more tributary than feudal—and it is not certain that they were—some counting must have been necessary. Under the tributary mode of production, the king may not have been too fussy about the exact size of the gifts he received from his closest retainers every year, in a way that would have seemed utterly *louche* to a Mesopotamian bureaucrat. However, once his tributes were amassed, it is hard to believe that he did not employ someone to count up how much he had. This is saying nothing of the king's independent income from raiding, crown land, and trade taxes, to accept Arup's skeleton state. Trade taxes in particular must have been quantifiable.

There are indications that the principle of transmuting value into measurements of other resources was known in the Viking Age, and this would have been a key principle for assessment. We could name any number of examples: The *Jutish Law*, codified in 1241 but with Viking Age roots, uses *skeppæ ruff*, “barrel-measures of rye,” to quantify a fine.⁷¹ Measures of rye are also used as a prescribed rent payment in the Old Norwegian *Law of Frostaping* (ca. 1200, again with much older content).⁷² The Icelandic *Neighbor Law* (ca. 1300?) mentions *merkur rugar*, “marks of rye,” double-malted, as a cubic measurement. One hundred of these rye marks indicated twelve quarts (*fjórðungar*) of butter, or six weights (*vættir*) of stockfish, four weights of fermented shark meat, twelve quarts (!) of seal jerky, twelve sheets of fabric, and other equivalents.⁷³ A Swedish runic inscription on a ring later reused as a door handle, known as Hs 7, or the Forsa Ring, dates from the 800s–900s. It records three fines in denomination of oxen and *aura*, a Scandinavian currency derived from Roman *aureus*.⁷⁴ We might also think of the West Norse practice of using *vaðmál* (units of homespun wool) to quantify any other resource.⁷⁵ None of these units can tell us confidently what measurements a Viking Age assessor would have used, although something anchored to rye is a recurring element. They do, though, suggest that there would have been a way to turn tributes, gifts, dues, and taxes paid in kind into numbers.

Of course, we have established that those numbers could not have been rendered with runic script. Here, the tallystick becomes of crucial importance: A staff which was notched every time a given unit was counted—normally ones but sometimes denominations, particularly four or twenty, hence the synonymy of “score” and “twenty” in a number of European languages.⁷⁶ Tallysticks were widely used in both the state and non-state spheres across medieval Europe, although very few survive

⁷⁰Ibid., 24–44.

⁷¹*Den Jyske Lov* 1941, 120.

⁷²*Norges Gamle Love* 1846, 240.

⁷³*Búalög um verðlag og allskonar venjur í viðskiptum og búskap á Íslandi* 1915–1933, vol. 1, 39.

⁷⁴Haki Antonsson 2020, 15–16.

⁷⁵Footo and Wilson 1979, 171–72.

⁷⁶Liestøl, Kerkkonen, and Jansson 1981, 322.

relative to how omnipresent they are thought to have been.⁷⁷ The Bryggen finds revealed several High Medieval tallysticks with accompanying runic inscriptions, including one that appears to have also had a correspondence function. N B116 reads **þora : sæh : m(e)r**, *Þóra, seg mér*, “Tell me [how much?], Þóra.”⁷⁸ One imagines Þóra being handed a stick, unnotched but with a message, counting whatever item was supposed to be counted by notching the stick, and then sending it back.

Surviving Viking Age (i.e., pre-1050) tallysticks are rarer. There may have been one in the Bryggen deposit, but it may equally be post-Viking.⁷⁹ The Narsaq Stick (GR 76), dating ca. 980 to 1020, has also been proposed as a tally stick by Lisbeth Imer.⁸⁰ On surface §D it contains forty-seven often repeating glyphs. Another Greenlandic stick currently without a signum in the *Samnordisk runtextdatabas* (Garðar 24) has also been proposed as some sort of counting device, though Imer’s examples are conjectural.⁸¹ Indeed, if §D of GR 76 is a tally then who knows how many other currently illegible inscriptions consisting of repeated letters would also be. As an aside, we should note that if §D contains a tally then the mostly legible inscriptions on §A and §C cannot be read as in any way commenting upon the stick’s supposed administrative purpose. Nonetheless, while surviving Viking Age tallysticks are few, they are also referred to in the *Law of Frostaping*, which, although essentially a High Medieval text, has most likely inherited statutes from the Viking Age:

Fyrir sinn úmaga scal hverr gera leiðangr þar sem hann er síalfr staddr. en ef hann lætr fallaz þá varðar honum síalfum þat en ecki búendum. En fyrir hvern mann er maðr húsar oc heimar. frjálsan mann oc fulltiða. þá varði þeir síalfer gerðum sínum en eigi boendr. en þó scal búandi hver augliós nef hafa af bryggiu sporði á skoru kefli fyrir ármann.⁸²

For every man not fit for military service *leiðangr* must be paid where he is based, and if he fails to do his duty then he is responsible for it and not the farmers [*bændr*]. And for every man who [another man] gives house and home, a freeman who has come of age, then they must do service and not the farmers. However, every farmer must declare this clearly at the end of the boarding jetty on a tallystick before the reeve [*ármaðr*].

Here, the local *bónði* (a free farmer, not unlike a yeoman) is required to keep a tallystick (*skorukefli*) of the young men in his household subject to the *leiðangr*—a military levy which sometimes worked as a tax, whose workings I do not have space to discuss here. In this Norwegian example, it is the subject who creates the record. The role of the king’s man (the *ármaðr*) is apparently to certify or perhaps collect the tallystick, but not to count it for himself. This perhaps works for military service, but it is hard to imagine that the early Danish state relied exclusively on self-assessment of this type. I will return to this point, but for now conclude that the tallystick was the primary technology deployed in whatever assessment the early Danish state undertook.

⁷⁷Clanchy 2006, 123–24.

⁷⁸Liestøl, Kerkkonen, and Jansson 1981, 322.

⁷⁹Hansen 2005, 249–50.

⁸⁰Imer 2017, 81.

⁸¹Ibid., 81, 195.

⁸²*Norges Gamle Love* 1846, 200.

We must assume that the cumbersome runic method of spelling out numbers, as on Vg 4, was only used in the issuing of reports between the king's men.

Moltke's Godofridus Theory

So far, I have given a picture of the runic script as being somewhat unsuitable for statecraft. It should be noted that it has been suggested that there was a deliberate attempt to ameliorate this deficiency. The runic script in Scandinavia was drastically shortened around the year 800. Prior to this time, the runic alphabet used in Scandinavia is known to scholars as the Elder Futhark. It contained twenty-four runes and was used not only north of the Eider but in all Germanic-speaking regions. It described Scandinavian phonology relatively well. In the course of the eighth century and particularly around the turn of the ninth century, a change appears to have radiated out from Denmark.⁸³ The Younger Futhark emerged, which contained sixteen runes and described Old Norse phonology poorly.⁸⁴ Differing theories have been proposed to explain this shift. Following Schulte, these explanations can be classified either as “intentional” or the work of an “invisible hand” (that is, unintentional and the result of various inscrutable forces).⁸⁵ The latter type are generally phonological, for example the hypothesis that the consonantal repertoire of Common Scandinavian as it transitioned out of Common Germanic required little differentiation to form minimal pairs, and so the alphabet naturally economized.⁸⁶ I agree with Barnes's observations concerning these solutions.⁸⁷ Proto-Norse gained vowels compared to Common Germanic, and yet the Younger Futhark has no extra vowels. Worse still, the loss of Elder Futhark consonants that are useful for establishing minimal pairs, especially X /g/ and M /d/, can in no way be attributed to phonological change. Phonological factors may have caused smaller developments along the way, but in my view, they cannot alone explain the transition from twenty-four to sixteen.

“Intentional” explanations smooth over these problems by admitting the universal principle that a technically inconvenient reform—in this case the loss of a lot of perfectly good consonants—can easily be made if somebody in a position of power thinks it is a good idea. One recent intentional explanation comes from Imer, who tentatively suggests that the Younger Futhark was designed to conceal dialectal differences in Scandinavia: “*På denne måde kunne skriftsystemet også være med til at binde Norden sammen i et større kulturelt fællesskab, som måske skulle modsvare stormagten mod syd*”; “In this way, the writing system could contribute to uniting the Nordic region in a greater cultural community, which perhaps was supposed to counter the great power to the south [i.e., Francia].”⁸⁸ There are profound problems with this theory. As we have seen, power in Scandinavia around 800 was a fragile thing. Could a given viking warlord, even one with the title of king, seriously have imagined uniting all of Scandinavia? And even if they could, would a shared language have been a sufficient justification for such a daring dream? It is true that language was a key factor in personal identity in the Middle Ages, and it was sometimes, though

⁸³ Moltke 1976, 148–50.

⁸⁴ Barnes 2012, 54–59.

⁸⁵ Schulte 2011. An excellent overview is provided by Schulte 2019.

⁸⁶ Kortlandt 2003.

⁸⁷ Barnes 2012, 58–59; 2004, 26.

⁸⁸ Imer 2016, 35–36.

not always, held that peoples of one language ought to be grouped together in political units.⁸⁹ But regional identity in the Early Viking Age was apparently a competitor for proto-national identity, as we have seen in the case of the *Westfaldingi* at Nantes in 843. If even “Norwegianness” and “Danishness” were works in progress, it is hard to imagine that anyone was so invested in pan-Scandinavianism that they ordered spelling reforms in order to promote it. Indeed, as Spurkland noted, the runic script was ill-suited for the composition of literature.⁹⁰ It could hardly be a vehicle for disseminating the sorts of lengthy texts through which an established literary norm could affect identity formation. (Think, for example, of the *Bāburnāma*’s role in spreading Čagatai Turkic, or the *Aṣṭādhyāyī*’s in spreading Classical Sanskrit.)

But if Imer is at fault for projecting modern ethnic preoccupations onto the past, I believe she is on the right track for thinking that the transition to a less legible orthography could have been a political project. A more convincing intentionalist solution was offered by the runologist Erik Moltke. He observed that the change happened around the same time and place where the Danish state was beginning to cohere in a serious way, under the same King Godofridus we encountered in the *Royal Frankish Annals*:

Possibly this alphabet was in use for some time before it was made “the law of the land”—why not as the result of the work of a committee established by King Godfred? (Naturally I speak with every reservation!) It confirmed and “legalised” a development long in progress: in the same way as one of Godfred’s successors, Harald Blacktooth, in converting the Danes to Christianity c. AD 960 gave official sanction to a development that had also been long in progress in the nation.⁹¹

I want to develop Moltke’s hypothesis further. Reducing the alphabet from twenty-four to sixteen symbols did serious harm to the readability of runic script. As I noted, one could no longer differentiate between voiced and voiceless consonants. Depending on one’s dialect, spoken Old Norse during the Viking Age probably had around thirty-six vowel sounds (here counting long or short, nasal or oral as distinct).⁹² The Norwegian Homily Book (AM 619 4to, ca. 1200), has a repertoire of twenty graphemes including digraphs to represent its vowels (<a, á, e, é, i, o, ó, u, ú, y, ý, æ/ǣ, œ/ǿ, ø, ø, œ, [an accented æ],⁹³ æi, æu, and øy>), though nasality had been lost by this point. The Elder Futhark managed eight: <ŋ, f, l, J, M, ŋ, fŋ, fl>, and the Younger Futhark came down to six: <ŋ, ƿ, l, ƿ, ƿ, ƿ>. Thus, to take a random example, the name Gyða became **kuþa** (DR 99), which, without context, cannot be differentiated from *góða* “good” (fem. acc. sng, masc. acc. pl., various weak declensions) or *goða* “of the chieftain.” The limitations of the new script seem to have exercised rune carvers too. A magnate of the 900s by the name of

⁸⁹Bartlett 2001, esp. 48–53.

⁹⁰Spurkland 2004. I would like to supplement Spurkland here. The longest inscription on a runestone is from the ninth-century Rök Stone (Ög 136). It contains 168 legible words. It is 382 centimeters tall and 138 across, and at its thickest 43 centimeters. The classic Old Norse saga, *Njáls saga*, is 100,119 words long. It would therefore take 588 Rök stones to retell *Njáls saga*. Optimally arranged, the resulting complex would stretch for 2.5 kilometers. *Quod erat demonstrandum*, literature cannot be transmitted under conditions of runacy.

⁹¹Moltke 1976, 182.

⁹²Barnes 2004, 8.

⁹³It was not possible to reproduce this MUFI character due to typesetting issues.

Hrafnunga-Tófi is **hribno : k tubi** : on DR 30, **rafnuka:tufi** on DR 29, and **rhafnukatufi** on DR 26.⁹⁴

Schulte suggests that this clunkiness, especially the removal of the distinction between voiced and unvoiced, is a sign that the script was *not* deliberately reformed: “It is otherwise doubtful that reformers would dispense with necessary graphemes which reproduce some of the language’s distinctive phonemes, such as /d, g/ in relation to /t, k/ (*Det er for øvrig tvilsomt om reformatorer kvitter seg med nødvendige grafemer som gjengir noen av språkets distinktive fonemer som /d, g/ i forhold til /t, k/*).⁹⁵ But such drastic reductions are exactly what a ruler would do if they needed to train a large number of administrators quickly. As Barnes puts it, modern historians and philologists have viewed this as “an incomprehensible impoverishment of the writing system... For those who wrote runes, however, the new system must have been quicker to learn, and have offered economy of carving effort.”⁹⁶ The Younger Futhark was designed to be, not easy to understand, but rather easy to learn. If the messages that Godofridus’s men were sending to each other were relatively short and formulaic, as bureaucratic dispatches tend to be, then their context would help to predict their content, even though the Younger Futhark spelling system is hopelessly imprecise.

If Godofridus did order reforms to the runic alphabet, then it appears he aimed to facilitate correspondence, not assessment. Numbers were not introduced. This accords with the sorts of activities Godofridus’s state apparently oversaw. For example, when he expanded the Danevirke fortifications in 808, he tacked the project onto the end of a pre-existing military campaign against the Carolingian Empire.⁹⁷ He did not need assessors to work out how to feed a crowd of slave laborers for his stretch of the Danevirke, as the Mesopotamians did for their building projects. He seems to have deployed the military levies of his own *leiðangr*, who were required to bring their own provisions. But he probably did need corresponders to write back to Denmark to order up the tools and specialist personnel who could build earthworks, which presumably could not all have been brought on the initial military expedition. Doubtless, those who knew how to build walls also knew how to fight since the free man of the Viking Age had to be an all-rounder.⁹⁸ But why risk a gifted builder on the battlefield, or risk fatigue among the infantry by encumbering soldiers with too much equipment? Correspondence solves this problem by allowing the operation to be divided into two logistical phases.

Godofridus, *Brytar*, and *Þulir*

Earlier, I took the suitability of the runic script for correspondence, plus its unsuitability for assessment, to suppose that whatever administration the Danish state required was done with tallystick (*skorukefli*) in one hand and *rúnakefli* in the other. That is, *rúnakefli* and *skorukefli* appear to have been understood as two

⁹⁴Such variation is at odds with Schulte’s observation of naturally occurring norms in runic spelling (2008, 171–75).

⁹⁵Schulte 2008, 170; 2009, 110–12.

⁹⁶Barnes 2012, 59.

⁹⁷*Annales Regni Francorum inde ab a. 741 usque AD a. 829* 1895, 126. I am preparing an article that explores the potential logistical and administrative demands of this campaign.

⁹⁸Footo and Wilson 1979, 89–90, 180–81.

separate technologies; remember that if Imer's Greenlandic runesticks *are* tallies, their text has nothing to do with their numbers. But can we say anything more about the people who putatively wielded these administrative implements? Moltke spoke of a "committee" that might have devised the script. In light of the conclusion that early Danish states were prone to breaking down, I think that we are probably looking at a group of rune-literate people close to King Godofridus, charged with training a cadre of bureaucrats during a period of relative stability. Their principal aim must have been to streamline correspondence, because they did not remedy the deficiencies in assessment by adding numbers. This indicates the limits of Godofridus's extractive power.

I use the term "cadre" because this was nothing like a stable civil service. Following Godofridus's death in 810 the stability of the Danish state quickly deteriorated. I assume that anyone trained in the Younger Futhark retained no bureaucratic position once his kingdom fragmented. In this way, the runic techniques that were created by the state, for its own purposes, were scattered on the wind. People who had been trained in the new "quick to learn, hellish to read" script stopped doing correspondence and assessment and went back to the normal runic practices of memorialization and graffiti, now equipped with a script in which it was easy to train others. Godofridus may not have been the first king of a Scandinavian petty state whose rule brought something like this. Five of the weapons with runic inscriptions recovered from the ritual deposition at Illerup Ådal, around 200 AD, (two lance heads, DR MS 1995; 335A, DR MS 1995; 335B, and three mounts for shield grips, DR MS1995;334C, DR MS1995;336B, DR MS1995;336C) exhibit a peculiar innovation where Þ is written rather like Φ and þ resembles ϕ (owing to printing limitations, I have had to use the best Unicode equivalents I could find rather than Gullskoen font). If the weapons at Illerup belonged to a "political alliance of peoples from several regions along the Norwegian coast and inland valleys,"⁹⁹ it might be inferred that the elite in this putative confederacy preferred their runes in this style. Perhaps many rulers tried to harness the power of runes, but only Godofridus's attempt became the norm across the Old Norse-speaking world.

Godofridus's runic cadre were probably not noblemen. The Old Norse poem *Rígsþula* suggests that runacy was seen as befitting an elite son: *Hann við Ríg iarl rúnar deildi / brögðum beitti oc betr kunni; / þá qðlaðiz oc þá eiga gat / Rígr at heita, rúnar kunna*; "He [the archetypal noble son] dueled in runes with Lord Rígr / Traded tricks and knew more / Then he won the right of being able / to be called Rígr himself, knowing runes."¹⁰⁰ But the servile business of counting the king's wealth and dispatching messages to organize logistics could hardly have been a fitting occupation for an aristocrat. Godofridus's short-lived generation of bureaucrats must therefore have resembled reeves more than they did lords. These were probably people of lower rank, ideally with prior experience of managing resources that were perceived as belonging rightfully to someone else. It appears that there was a tradition of reeve-like figures possessing runic literacy. Two Danish runestones from after Godofridus's time, probably 950–1000, are raised by men holding the office of *bryti* (DR 40, DR 83). The older stone, DR 40, seems to stress the identity that came with the office: **tufi ÷ bruti ÷ risþi ÷ stin ÷ þansi ÷ aft ÷ lika ÷ brutia ÷ þir ÷ stafar ÷ munu ÷ þurkuni ÷ miuk ÷**

⁹⁹Ilkjær 2000, 146–47; Ilkjær cited in Looijenga 2003, 91.

¹⁰⁰*Edda* 1983, 286.

liki ÷ lifa; *Tófi Bryti rešpi sten þensi eft líka brytja. Þer stafar munu Þorgunni mjök længi lifa*; “Tófi the *bryti* erected this stone in memory of the *bryti*’s equal. These letters will live a long time for Þorgunnr.” The position of *bryti* probably originated as a slave tasked with overseeing their master’s lands, perhaps while the master was absent.¹⁰¹ Later in the Middle Ages the position became a free rural overseer, sometimes assuming the tax privileges of the landlord whose fields he held.¹⁰² It seems to have been a respected office. The inherent managerial responsibilities would presumably have made it desirable for *brytar* to possess runic literacy for the purpose of correspondence. We cannot know what title Godofridus’s transient runic bureaucrats used. *Bryti* is a sound option. Another is *þulkr*.

The title of *þulkr* encompassed a broad range of activities.¹⁰³ It has an Old English cognate, *þyle*. In *Beowulf*, the *þyle* Unferð has been described by one commentator as “the sage, the wise man with the well-stocked mind.”¹⁰⁴ His unfriendliness to the titular hero has been explained as a sign that the *þyle* was seen as occupying a male role outside of the warrior code. Rather, being weird, inscrutable, and knowledgeable about all manner of people and things was part of their job description.¹⁰⁵ Poole convincingly argues that the *þulkr*, however their role may have varied from ruler to liegeman at various times and places, was essentially a “rememberer” and a “linker” (my terms).¹⁰⁶ That included committing to memory the details of genealogies, stories, and mythology. The mythological-mystical element is particularly colorful, and several sources describe Óðinn as a sort of *þulkr*-in-chief.¹⁰⁷ One runestone, DR 248, is among the earliest Danish inscriptions in the Younger Futhark.¹⁰⁸ It exhibits the term *þulkr*:

kun'ualts stain ' sunar ' ruHalts ' þular ' o salHauku(m)

Gunwalds stein, sunar Róalds, þular á Salhøgum.

The stone of Gunwaldr Róaldsson, the *þulkr* of Salløv

It is not clear whether Róaldr or Gunwaldr was the *þulkr*, though Jacobsen and Moltke recommend the son, Gunwaldr.¹⁰⁹ Regardless, loyal *þulir* would have been useful people for a ruler creating a bureaucracy. They would have had access to orally transmitted knowledge about people and places in given areas. Moreover, we should consider the etymology of *þulkr*. It is related to the noun *þula*, meaning a list.¹¹⁰ The existence of Old English *þyle* shows that the title predated the eighth century, but we should note that it would have been a fitting title for those who carried both a *rúnakefli* and a *skorukefli* in the service of Godofridus. Today we might call an assessor a “bean counter,” but the work of keeping tabs on Godofridus’s income,

¹⁰¹Brink 2008, 6; 2018, 140–45.

¹⁰²Porsmose 1988, 257.

¹⁰³Jacobsen and Moltke 1942, 729–30.

¹⁰⁴Clarke 1936, 63.

¹⁰⁵Ibid., 65–66.

¹⁰⁶Poole 2010a, esp. 237–52; 2010b.

¹⁰⁷For a magisterial study of mythological and every other context, see Tsitsiklis 2017.

¹⁰⁸Jacobsen and Moltke 1942, 299.

¹⁰⁹Ibid., 302.

¹¹⁰De Vries 2000, 626. Caution is often necessary with De Vries given his Nazism, though his etymology here appears reliable.

under the tributary mode of production, probably required less counting and more listing. I am not arguing that the carver of DR 248 was a graduate of the runic training program under Godofridus proposed by Moltke. The runes are not in a typical Younger Futhark, but rather are a transitional variant, formerly known as the Helnæs-Gørlev type, although this typology is now considered redundant.¹¹¹ Was the carver someone who had known the Elder Futhark and been introduced to the Younger Futhark by Gunwaldr, but was unable or unwilling to relinquish H for /h/ and */a/? The dating of the stone, on the other hand, means it is not impossible that Gunwaldr (if he was the *þulkr*) had first been given authority over Salløv during the reign of Godofridus, and later became an independent magnate in the course of the civil wars. But all this is pure speculation, even by the standards of Viking Studies.

Ultimately, if Godofridus aimed to put runic script to the service of the state, his success was fleeting. The Younger Futhark was easy to learn and quickly spread beyond the state. Much is made of the tenth-century Jelling Stones and their supposed declaration of the establishment of stable, governed, Christian Denmark. But in truth the successful use of the runic script by the state was a statistical anomaly. Of some 266 surviving runestones in Denmark, only eleven, including the Jelling Stones, mention kings, queens, or people apparently in royal service (DR 3, DR 4, DR 41, DR 42, DR 66, DR 134, DR 55, DR 81, DR 133, DR 134, DR 107). That is just 4 percent of the total corpus. One might add that one of these, DR 66, was erected to commemorate a man named Full who died *þá konungar barðusk*; “when kings fought each other.” A similar expression is found on a Swedish stone, Vg 40, for a son who *varð dauðr í orrustu, er barðusk kunungar*; “fell in battle, when kings fought each other.” I do not think that either inscription can be read as a cheer for the state. There is no enthusiasm here for a particular side. Rather, one thinks of Deleuze and Guattari’s concept of the “War Machine”: the notion of War taking on a life of its own, perceived by the people who carry it out as separate from themselves.¹¹²

If DR 66 expresses a muted weariness about the state, most Danish runestones instead give the impression of blissful ignorance of it. They commemorate and aggrandize local big men, their families, and their achievements in local infrastructure. Put another way, they celebrate the sorts of people whose local hegemonies were first a threat and later an irritant to the Danish state. To be sure, this is not cuddly anarchism of the type that Scott identifies in the Zomia Highlands of Southeast Asia.¹¹³ Danish runestones are not the work of freedom-loving peasants living an anarchist ideal, although it has recently been argued that a Zomia-like “art of not being governed” may in part explain the establishment of certain Danish thors.¹¹⁴ Rather, the elite whose names are recorded in granite on our stones probably opposed kingship mostly because they were not yet themselves a king.

Conclusion: Domesticated and Wild Writing

In closing, let me return to Scott’s provocative *Against the Grain*. One of the book’s driving theories is that domestication was not just something that happened to cereals

¹¹¹Moltke 1976, 163; Imer 2014, 166–67.

¹¹²Deleuze and Guattari 2004, 387–467.

¹¹³Scott 2009.

¹¹⁴Borake 2019.

and certain livestock. When animals are domesticated, Scott notes, something called the “domus effect” kicks in. Compared to their wild counterparts, they become smaller and more docile. They become more fertile, but their brains get smaller.¹¹⁵ They retain juvenile traits longer into their lives. It is a slow process and there is a lot of room for interstitial states of being. Both cats and goats, for example, are about halfway along in the process, half-wild, half-domesticated. Foxes, pigeons, and most other vermin are only just beginning their journeys towards domestication. However, Scott claims that the domus effect is universal. In his view, it even applies to humans. Hunter gatherers are taller, more aggressive, but less fertile than those living in agrarian-based economies.¹¹⁶

Scott sees writing as something that emanates from the state. But what if writing, too, can actually come from the wild, while the state seeks to subject it to the domus effect? Just as wild species versus domesticated species have certain overarching morphological traits, could the same be said of scripts? Runeiform scripts are angular, designed to be carved into wood and stone.¹¹⁷ They are suited for the commemoration of magnates, for casting spells, for telling rude jokes. But in order to be successfully domesticated by the state, they have to increasingly be written on more portable, more forgiving surfaces such as papyrus or parchment. As writing moves away from being carved with a knife to being written with a pen, it becomes increasingly cursive and flowing. Orthographic conventions emerge—something that Old Norse in runic script mostly lacks compared to, say, Latin in its own alphabet. (There are a handful of conventions, such as voiced alveolar nasals not being written before plosives, but they are rudimentary. If there were consistency then the “first law of runo-dynamics” would not be true: “For every runic inscription there shall be as many interpretations as there are runologists studying it.”)¹¹⁸ These changes take centuries to occur, of course, just as domesticating an animal does. But these morphological developments can be observed in the transition from, say, Canaanite script to Aramaic/Hebrew script, from Archaic Latin script to Classical Latin script, and to some extent from Brahmi script to Devanāgarī. Similarly, Germanic runes uncannily resemble writing systems with which, according to scholarly consensus, they have no genetic relationship, for example Hungarian Székely or its likely ancestor, Turkic Orkhon.¹¹⁹ But they have in common the quality of existing largely outside of the state. Scott theorizes that cereals breed scripts, because they stimulate the impulse to measure and exploit. I have set out to show that the history of the alphabet in Scandinavia tells an opposite story. If Moltke’s theory is correct, one might say that Godofridus hoped to *domesticate* runes

¹¹⁵Scott 2017, 76–83.

¹¹⁶Ibid., 113–15.

¹¹⁷Scandinavian runic inscriptions do sometimes exhibit curvature, but it is a fairly unusual trend and tends to be correlated with the inscriptions being later. As Schulte puts it: “The rune shapes indicate a relationship to the working material wood ... the older runes are normally made up of a combination of straight lines: long verticals or staves combined with one or more either short or long sidestrokes or branches. These branches tend not to run horizontally—a tendency which is often assumed to indicate that runes were originally designed to be cut in wood. Horizontal (and curvilinear) lines along the grain are generally avoided as they would easily disappear” (2015: 89).

¹¹⁸Berkhout, Parsons, and Wilson 1995, ix (commonly attributed to David Wilson alone).

¹¹⁹Thomsen 1882, 70–82.

with the Younger Futhark. Instead, he sowed a crop which soon took to the wild, never to be harvested by the state.

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