"...blindr er betri en brenndr séi..."
Runes as a Tactile Writing System[1]

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> "Attempts to devise characters which could be understood by the blind through their sense of touch reach far back in the epoch of human progress, perhaps to the time when letters or figures were inscribed on some substance to be read by another, and certainly to the earliest period when efforts were made to give instruction to the sightless. The first recorded attempt to find such a means was made shortly after the beginning of the sixteenth century (*ca*. 1517), when Francisco Lucas of Saragossa, Spain, contrived a set of letters carved on thin tablets of wood." Best 1919:396

Haltr ríðr hrossi,
hjörð rekr handar vanr,
daufr vegr ok dugir;
blindr er betri
en brenndr séi,
nýtr manngi nás.
Hávamál 71

0.0 Introduction

In the spring semester of 2010, I was faced with a didactic dilemna. In a graduate overview of the "History of the German Language," my students were to

[1] I would like to thank Brad Blair for his willingness to share his time and expertise with me during the gestation of this project. My colleagues in the Department of Germanic Languages at UIUC provided helpful suggestions and encouragement when I presented a preliminary version of this project at a research workshop in Fall of 2009. Sharon Polomé gave me many of the reference works from her late husband's library that made this project feasible. Finally, heartfelt and sincere thanks to Marianne Kalinke, whose generous support has made it possible for me to attend this symposium.

spend a brief amount of time looking at the runic writing system as applied to older Germanic languages. As is usual in such courses, a fair amount of time is devoted to the shapes of the letters, their visual relation to precursor scripts, and the impact of writing materials on graphic practices (i.e. use of wood and lack of curved lines, avoidance of horizontals). Normally, when I teach this course, it is with heavy use of the chalkboard for the graphical information and also with pieces of wood, which I use to illustrate the problems of working with a grained surface.

This all sounds easy enough, but, as noted at the outset, I was faced with a dilemna. One of my graduate students in this class, Brad Blair, was a "problem." Brad was easily the most motivated person in the group, he had a better background in historical linguistics, in phonology, and in Older Germanic than any of the others. Further, he was probably the most interested student I have had in this course for some time. The "problem" was that he is blind.

My visual teaching materials and approach had to be rethought. At one level, this meant that, for example, instead of just drawing a rune on the board next to a Latin equivalent or source, I had to describe verbally the actual difference in shapes. But when it moved to producing some actual runes on a piece of wood, the idea hit me that I could pass the wood to him and he might be able to feel the letters I carved, that he could have a similar interaction with my materials to that of his peers.

As it turned out, this approach was successful. Each time I illustrated a runic letter and carved/scratched it onto my piece of wood, showing the contrast of the curved letter form and the runic one, I would hand it to Brad, and he, by his comments and questions, was clearly able to interact with the materials.

This might have just stayed an isolated didactic moment, were it not for Brad's willingness to delve into runes and blindness more thoroughly. The question arises to what extent runes can function as a tactile writing system, i.e. one that is read using touch. In the first part of this paper, I will report on some preliminary work with Brad on this very problem. It is my intention to expand this first set of trials to work with other blind or visually impaired subjects. However, the rules on use of human subjects are very stringent at American universities and I am still in

the process of negotiating the burocratic hurdle. I have identified a number of potential subjects, including a blind Eagle Scout from the area and other students at the University of Illinois who are not "contaminated" by Germanic or linguistic studies. As suggested by the organizers of this symposium, I have been asked to report on work that is "in progress." It is to be hoped that the comments and input from others here will contribute to this becoming a more complete treatment.

2.0 First Experiments with Brad Blair at UIUC

A few words about Brad. He is congenitally blind, has a B.A. in German from U. of Memphis**,** and an M.A. from U. of Tennessee. As of Fall 2010 he has finished all pre-doctoral coursework at UIUC and is entering the dissertation stage. As an undergraduate and graduate student, Brad has taken a series of courses in historical and synchronic linguistics. Importantly, he is extremely literate, and reads Braille.

In February of 2010, Brad and I sat together with scraps of wood and various sharp implements. In the course of our meeting, I carved for him a series of letters and sequences of letters on planed pieces of oak and pine. For each letter or sequence, I asked him to describe the patterns of inscription as he felt them, but I gave him no input as to shapes of letters or the like. My question was whether he could regularly recognize and describe graphs in a consistent and differentiating manner.

The lines I inscribed were fairly shallow, made either using a small steel knife or a sharp piece of worked flint. I focused primarly on the first 8 letters of the older Futhark. Here a note from that session:

> "Inscribed runic f u þ f and had B. describe lines without any initial guidance. B. started from u and described it very accurately, also suggesting which line was made first. No confusion with line that was gone over twice. For first f B. thought it was a vertical line with three top branches; described second f accurately."

In other words, Brad was able to describe to me the letters with sufficient accuracy that I would have been able to recreate them unequivocally. If he actually knew runes, he would have been able to read them.

As part of the second phase of this interaction, I described to Brad some basic principals of runic writing, in particular the concept of using a single full length vertical line as the base for most letters. This gave him a concrete reference point for his investigation of each graph. As it turned out, this increased his accuracy in recognizing, describing, and comparing the letters he felt.

In conclusion, I consider it proven that it is possible and plausible that runes could have been read and/or written by someone using only touch.[2] Questions that remain include how the use of other materials might affect tactile perception (cf. Révész 1938), ability to gain fluency in this form of writing, and the influence of already present tactile literacy on Brad's quickness in learning.

3.0 Development of modern tactile writing

Lorimer (1996) in her dissertation provides a broad overview of the history of modern tactile writing. Although she notes the earliest examples of actual writing millenia ago, she dates the use of tactile writing to the 18th century and links it to a change in social attitude toward the blind. Best also had assigned modern tactile writing's origins to this period (1919:396) and includes the work of Jacques Bernouilli in Geneva in 1711 with "wooden tablets in which letters were incised."

Best discusses the many attempts made in the 19th century to devise regular printed letters for the blind to read (see 1836 chart below). "The characters, furthermore, for the most part had their ceriphs, or strokes, removed from them, in order that they might more easily be recognized. They were also given sharp corners or keen edges, to increase their tangibility" (Best 1919:401).

One of the most important non-Braille systems, still used by a small number of readers in Great Britain, is Moon writing, which both modifies and creates symbols based on Latin letters. It also shows boustrophedon, although Best does not use this term (Best 1919:401).

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[2] An interesting note on the side is the possibility of non-visual runic use that is auditory and therefore accessible to the blind, namely the so-called *clophruna* of the *isruna* texts (cf. Derolez 1954:134-135; 167). However, in contrast to tactile reading, auditory signals would require the presence of two persons in a temporal location and fall outside the scope of this paper.


[3]

[3] http://commons.wikimedia.org/wiki/File:Moon-type-chart.jpg. Source: "Dr Moon's Alphabet for the Blind",

Braille writing, now the international standard, is based in principle on the Latin alphabet, but it (like New York Point inter alia) uses a system of dots that is more easily differentiated by touch than adaptations of Latin letter forms. Unlike, for example, Moon letters, Braille is not readable to someone who is literate in visible writing without much special training.

3.1 Runic parallels

Finding a parallel, of course, by no means proves a real connection or identity unless put in a consistent and disprovable typological context. In this section I look at parallels in the formal development and use of modern and early modern tactile scripts and various developments of runic writing. For this, Irwin's treatment of "The War of the Dots" is excellent background (1955). The wrangling and infighting associated with the development of modern Braille systems puts the question of tangibility of writing and its principles in a clear and practical light. What specific formal aspects of tangible writing have what impact on the readers? How have modern tactile systems dealt with the needs of the blind?

As will emerge, there are intriguing similarities of form and function between runic developments in Scandinavia and the evolution of modern tactile writing systems.

3.1.1 Simplification of structures

3.1.2 Change of graph shape to avoid ambiguity

One of the more interesting oddities I have found while comparing runes and tactile writing systems is the similarities of how in the one case a Mediterranean writing system's letter shapes are modified and how in the other the Latin alphabet as adapted to English usage has been reshaped. The following table from 1836 shows a variety of proposed tactile letter shapes.

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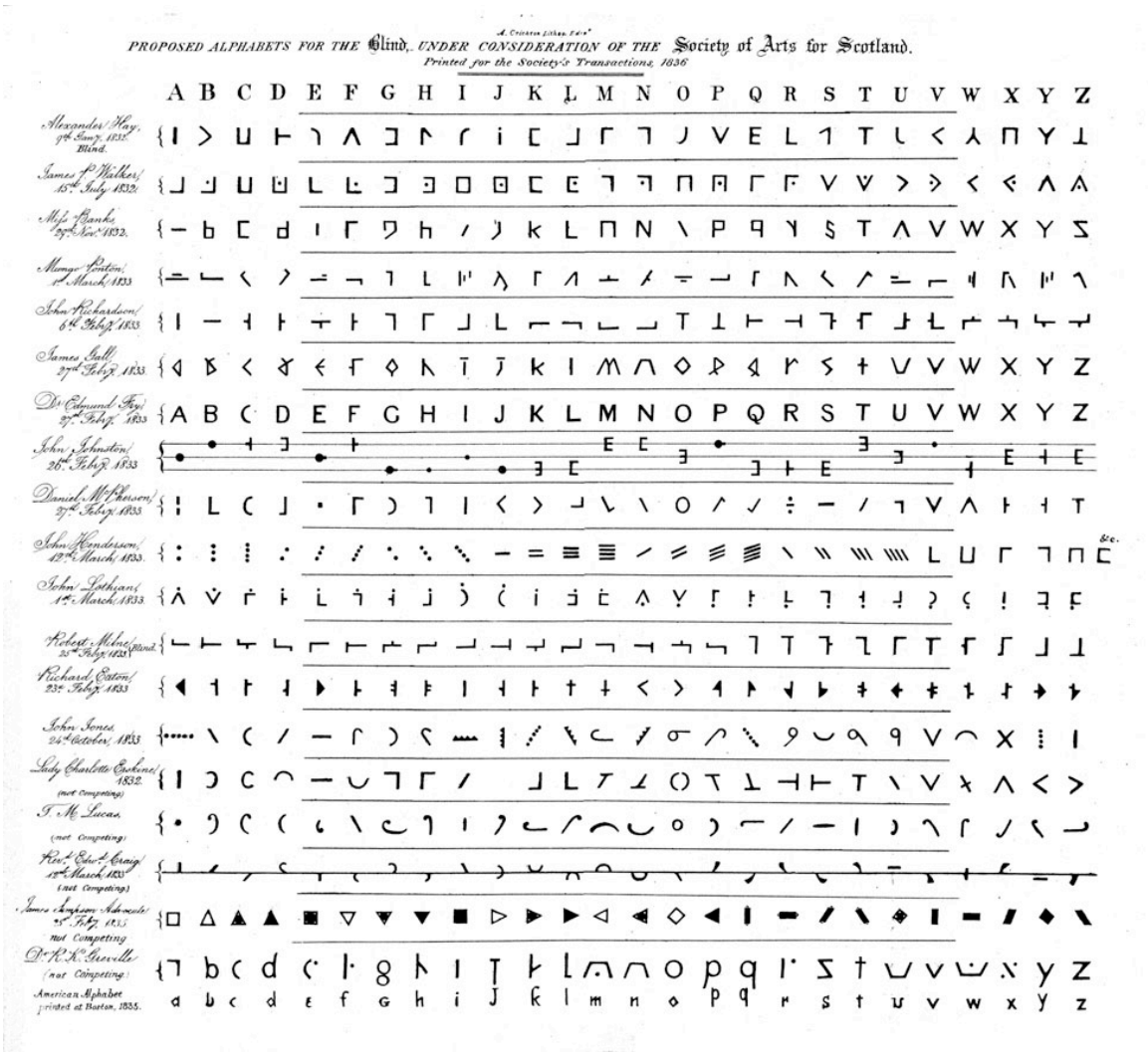
from William Moon's book *Light for the Blind*, London: Longmans & Co., 1877. I have hard copies of Moon catalogues that have this same image and can attest it is a good quality reproduction.



See here too the shapes of the Moon system in the previously given image.

3.1.3 Use of ligatures and contractions

Tactile writing systems make heavy use of shortenings for pragmatic reasons. For one thing, for tactile symbols to be legible to average fingertips, they must be larger than the equivalent non-tactile symbols. This is analogous to using an extremely large font size for visually impaired readers. You make the characters as large as they need to be for ease of unambiguous interpretation. This means, however, that just as large-print books are heftier then their standard print equivalents, Braille or Moon books may be quite bulky.

A second important factor in using ligatures and contractions is their help in facilitating faster reading and writing. As anyone who has learned to read texts in a

non-Latin script will be able to attest, one of the first things to slow us down in the new script is our need to look at each letter individually instead of visually grasping the *gestalt* of the words as a whole. One of the most important stepping stones for literacy in any language is the move from seeing sequences of letters to seeing and recognizing iconic words. This is only possible because we are able to take in all the letters of a word as a single visual input. For tactile writing systems, this is much less an option. However, the use of contracted forms of words fulfils this function in part.

Modern Braille may be classified as Grade 1 or Grade 2.[4] Grade 1 is a one to one substitution of Braille characters for Latin letters. This form of writing is used primarily by young learners and by the newly blind. Grade 2 makes heavy use of contractions and combined characters. Grade 2 is used by more experienced Braille readers and is necessary for advanced literacy. Grade 2 saves, according to a study by Durre (1996), ca. 20% space in printing.

Braille reading is comparatively slow. According to Bailey (2003), an average Braille use may be able to read at about 60 words per minute. And, Braille is not suited to skimming through texts or speed reading.

The parallels to runic writing speak loudly. The simplification of shapes and reductions of inventory in the transition of older to younger runes is readily apparent. Especially compelling is the comparison of Latin letters : Moon letters and Latin alphabet : Runic alphabet. The use of bindrunes and logographic runes is also well-known and reminiscent of what occurs in Grade 2 writing. Finally, the fact that modern tactile reading is so slow is least a hindrance when texts are short, and that is certainly the case for all runic materials of the medieval period.

3.2 Conclusions

Let me conclude this section by emphasizing that I am NOT taking these parallels as proof that runes were used or modified for the visually impaired. At the

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[4] Thanks to Brad Blair for helping me better understand the differences between different forms of modern Braille and for providing me the reference to Bailey 2003.

moment, however, they are interesting enough to merit further thought and investigation.

4.0 Sightedness and society: Blindness in the North

The common Germanic etymon *blind-* serves as a paradigmatic exemplar in many Older Germanic grammars when describing adjectival inflection (e.g., Grimm 1822:823; Jasanoff 2008:205). It is thought-provoking that we know so little about people with this disability beyond a label. We are blind to the blind of the past.

In the *Kulturhistorisk Leksikon*, the indexed term "blindhed" refers one to "øjensygdomme."[5] There is in fact no separate article on blindness. Møller-Christensen reports on disease of the eyes in the medieval Denmark (1976:642-643). His materials reflect either leechbooks and treatments for eye disorders, miraculous restoration of sight in hagiographic literature, or the politically motivated blindings of personages such as King Magus in 1135. Eithun (1976:643-644) provides a brief overview for Norway and Iceland. He too lists specific medicinal and literary references. What is missing is consideration of the reality of ophthamological disorders and of blindness. **[NOTE: Am waiting for a new book on disability in the middle ages, Cordula Nolte (ed.). 2009. *Homo debilis*).**

The most extensive study of blindness in early Scandinavia is that of Annette Lassen, in her 2003 monograph *Øjet og blindheden*. In this work, Lassen looks at how the role of vision and of its loss is reflected in literature, history, and mythology. She contextualizes blinding and loss of sight with the kinds of demasculinization so prevalent in the system of honor and face, i.e. with reference especially to the work of Sørensen on *argr* and the "unmanly man."

A primary focus of Lassen's attention is the blind god Höðr and his role in the

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[5] K. Ranke in RGA2 p. 486-487 under "Auge und Augendarstellung" speaks briefly of opthamological conditions, specifically, one-eyed-ness, from war and living conditions. Notes that the terms used for glaucoma sufferers such as OHG *glasougi* and *plehinouga* "wenn nicht mit den beiden letzten Worten auch das Glanz- oder Blinkäugige des sezernierenden Auges gemeint ist, wie überhaupt die Bezeichnungen für Schielen, Kurzsichtigkeit, Starblindheit, Triefaugen usw. durcheinander gehen (1, Band 3, 140)." Sudhoff in the first edition of RGA (1911) has more information on vocabulary, but likewise none on the role of the blind. In *Handbuch des Deutschen Aberglaubens*, almost all reference is to superstitions concerning the causes of blindness and treatments for it.

slaying of Baldr. Of interest is the contrast of blind Höðr in Snorri to sighted Høtherus in Saxo Grammaticus as passive vs. active.[6]

Lassen also offers interesting individual literary and historical references to blind persons.

Certainly, it is possible as well to see some level of the importance attached to eyes and eyesight by examining the various Germanic law codes for penalties associated with partially or completely blinding someone else. In the Langobardic law codes, for example, gouging out both eyes requires same payment as for *morth* in *angargathungi*.[7]

Of course, inclusion in a law code merely implies that a situation was considered theoretically possible, not that it was how common it was, nor what life for the blinded was like; and this is an element also missing in Lassen's work, namely the role of the blind in real life, in actual society. Put simply, what did it mean for an individual to be blind in early Germanic, in European medieval, or in older Scandinavian society?

Evidence is sparse. History of medicine generally uses as its source medicinal literature. There are a wealth of materials from Ancient Egypt on concerning treatment of ailments of the eye. For the Germanic world, the leech books of Anglo-Saxon England are particulaly rich in information on treating opthamological disorders.

Physical remains can tell us very little in this respect. Where trauma and some viral or bacterial pathologies are apparent from the osteological record, most non-traumatic ocular disorders affect only soft tissues and are therefore not

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[6] A puzzling reference may be found in Egils saga: *Egill fór leiðar sinnar ok þeir tólf saman. Kómu þeir fram í Raumsdal, fengu sér þá flutningar, fóru síðan suðr á Mæri. Er ekki sagt frá ferð þeira, fyrr en þeir kómu í ey þá, er Höð heitir, ok fóru til gistingar á bæ þann, er heitir á Blindheimi. Þat var göfugr bær. Þar bjó lendr maðr, er Friðgeirr hét. Hann var ungr at aldri, hafði nýtekit við föðurarfi sínum. Móðir hans hét Gyða. Hon var systir Arinbjarnar hersis, skörungr mikill ok göfug kona. Hon var at ráðum með syni sínum, Friðgeiri. Höfðu þau þar rausnarbú mikit. Þar fengu þeir allgóðar viðtökur. Sat Egill um kveldit it næsta Friðgeiri ok förunautar hans þar útar frá. Var þar drykkja mikil ok dýrlig veizla*. I find in Jónsson's edition and in the ÍF edition no reference to the mythological character.

[7] Katherine Drews' translation, p. 61. Note that the payment for one eye is half that and that this is the same as taking off one foot. p. 64. Two feet are not mentioned, but appears to be additive. P. 127 we get situation of putting out second eye of one-eyed person. Here you pay 2/3 of full value if you had killed him. This is for freeman. If slave or aldius, then full compensation.

recoverable by paleobiological approaches.[8] Megan Brickley and Rachel Ives have no reference to ocular conditions in their 2008 study of the bioarchaeology of metabolic bone disease.

Waldron (2009:221-235) gives a good overview of the problem of finding traces of soft tissue damage in paleopathological investigations. Nowhere in his book does he make reference to blindness.

Hiscock (2008:13) notes that blindness can occur as a residual after-effect of smallpox, a disease which can leave behind traces of irregular bone formation, especially bilaterally at the elbow joint (Waldron 2009:111). Of course, many cases of smallpox will not have left traces, and even if they did, they have only associative value with blindness. See Ó Corráin (2005:581) for a brief discussion of the impact of smallpox on early medieval Europe. Leprosy too can cause blindness, but again is not indicative itself of the condition.

None of this tells us about the people affected, how many of them there were, how long they lived, what they did in their daily lives and as members of the group. Were they burden, ward, or active member of society (cf. Lorimer 1996:Chapt 1)?

If we look for evidence of what the blind were doing, evidence is also poor. There are references to the blind as singers, seers, and poets (Lassen 2003; ADD Patrick Ford article from Cambridge Celtic Studies). However, this presumably doesn't account for all that many of those with vision disorders. And there would have been plenty. Rates of blindness in non-western societies in modern times are much higher than in the industrialized nations of the world, and the types of preventable and curable blindness that affect people in the "third world" are often the same as will have affected people in the Germanic past: glaucoma, cataracts, infection, and traumatic injury inter alia.

All of this tells us that blindness would have been a fact of life in the times and places where runes were used, but it doesn't give us any indication of its frequency or of the class, gender, or practical adaptations of those who were blind. It is absolutely conceivable, and, given the expanse of time involved, almost certain

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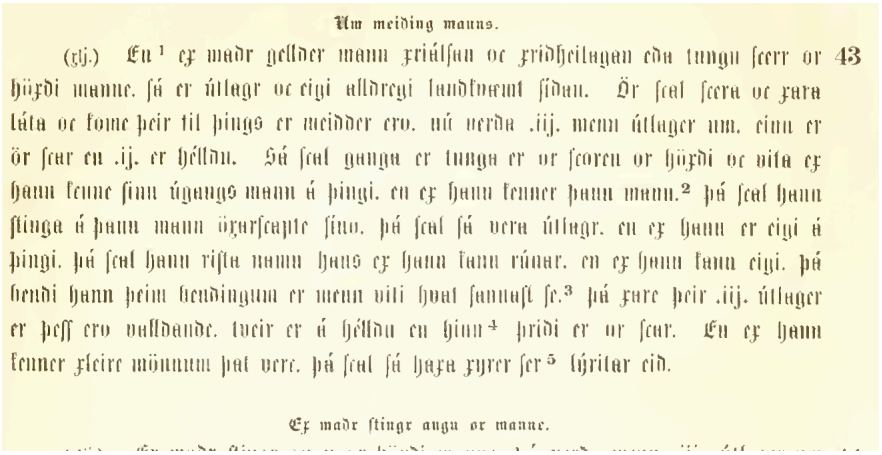
[8] Veterinary opthamologist Kay Schwink provided me with this information in a personal communication.

that at some time or the other, some person with runic literacy will have become blind. At the very least, we know he could have continued as a literate person even after having lost his sight.

Reference is found to use of runes by someone who has become unable to communcate by other means: Enoksen {1998:31) refers to Frostatingslagen "den som fått sin tunga avskuren skall rista gärningsmannens namn 'om han behärskar runor.'" This is in section Section IV,43 that deals with maiming (Keyser & Munch 1846:171).



Um meiding manns.

(xlj.) Ef[1] ex madr gellder mann friálsan oc fridheilagan eda tungu scerr or 43
höfdi manne. sá er útlagr oc eigi alldregi landkvæmt síðan. Ör scal scera oc fara
láta oc kome þeir til þings er meidder ero. nú verda .iij. menn útlager um. einn er
ör scar en .ij. er héllan. Sá scal ganga er tungu er or scoren or höfdi oc vita ef
hann kenne sinn úgangs mann á þingi. en ef hann kenner þann mann.[2] þá scal hann
stinga á þann mann öxarscapte sinn. þá scal sá vera útlagr. en ef hann er eigi á
þingi. þá scal hann rista nann hans ef hann kann rúnar. en ef hann kann eigi. þá
bendi hann þeim bendingum er menn viti hvat sannast se.[3] þá fare þeir .iij. útlager
er þess ero valldande. tveir er á héllan en þinn[4] þridi er or scar. Ef ex hann
kenner fleire mönnum þat vere. þá scal sá haxa fyrer ser[5] fyritar eid.

Ef madr stingr augu or manne.

One is reminded as well of the life of Egill Skallagrímsson. Egill, quoted many times for his verse on the danger of misusing runes, himself becomes blind with advancing age (LXXXV. Kapituli). We are never informed of his having used runes, however, once he was blind.

5.0 Runic Sightedness

As is to be expected, textual evidence from the early runes for sight and eyes is scanty. The most pertinant reference can be found on the bracteate from Nebenstedt:[9]*gliaugiR iurnR*. Krause/Jankuhn (1966:269-270) offer a translation of the relevant term as 'der Glanzäugige' and derive it from a verb *gljá*. This is defined in Fritzner as: gljá, *v*. (áð) ſkinne, glimre, = glæa. *Klm.* 177[20]; *Kgs.* 48 *v.l.* 52 *v.l.* The usual

[9] Krause/Jankuhn 1966, RaF 133, p. 269-70 Brakteat von Nebenstedt. "Im allgemeinen linksläufig."

assumption is that this is a nickname of sorts, an indication of the rune writer being sharp or bright-eyed. An alternative could be possible, however. If we note terms like OHG *glas-ougi* which refers to the effects of glaucoma or to another opthamological disorder, we are given the option of taking this person to be anything but 'sharp-eyed."[10]

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[10] 1) Here the relevant entry from Grimm, *Deutsches Wörterbuch*:

GLASAUGE [Lfg. 7,7], gläs(s)auge, gleszauge, n. vom natürlichen auge, meist des menschen und des pferdes. in wie weit ursprünglich zusammensetzung mit glas vitrum vorliegt, ist nicht in jedem einzelfall zweifellos. neben glasauge steht in der bedeutung 'glänzendes, starrendes auge' auch die form gläs(s)-, gleszauge (bes. im mundartlichen gebrauch, s. u.), die auf zusammenhang mit gläs(s)en weist (s. u. 2glasen, vgl. auch glarauge neben glarren) und in der die beziehung auf glas vitrum wohl erst sekundäre vermischung ist. in der anwendung auf ein durch weisze flecken und narben entstelltes auge ist die beziehung auf glas vitrum schon im ältesten beleg gegeben (vgl. auch FISCHER schwäb. 3, 671), wohl derart, dasz solche augen in ihrem aussehen an trübes (milchiges?) glas erinnern: (homo ... si caecus fuerit ... si lippus,) si albuginem habens in oculo clasaugi habenti (8.-9. jh.) ahd. gl. 1, 353, 59 St.-S. (zu Lev. 21, 20); si enim visus tactus fuerit de oculo, ita ut quasi vitro remaneat, quod Alamanni glasaugi dicunt, 20 solidos componat (hs. d. 9. jh.) leges Alamannorum 119 Lehmann; vgl. dazu im mhd. die adject. bildung glaseöuge von einem erkrankten auge, wohl durch grauen star, der die pupille weiszlich aufschimmern läszt: daz er erblindet oder sus boesiu ougen gewinnet, sûröuge oder glaseöuge oder starblint BERTHOLD V. REGENSBURG 1, 433 Pf.; vgl. mnd. glasôge starblindes auge LASCH-BORCHLING 1, 2, 119. auch glasauge 'auge mit glasähnlichem, blinden ring (greisenring, gerontoxon) um den stern herum' HÖFLER krankheitsnamenbuch 21a; mnd. glasôge LASCH-BORCHLING a. a. o. – auf ähnlichem eindruck beruht die anwendung von glasauge auf bestimmte, hellfarbige, insbes. weisze pferdeaugen, vgl. gläs-, glesauge, glasauge 'weiszes auge bei pferden und hunden' STAUB-TOBLER schweiz. id. 1, 136; glässaug(e) ... 'hervorstehendes, hellfarbiges auge, bes. bei pferden mit stahlgrauen augen ... name eines ochsen' FISCHER schwäb. 3, 671; glasauge 'auge welches um die pupille einen dem glas ähnlichen oder glasfarbigen ring hat, der den grószten teil des augapfels einnimmt, bes. bey pferden' KRÜNITZ 18, 680; glasauge 'von pferden, occhio vajato' JAGEMANN (1799) 523; CAMPE 2, 384b; glasoge 'aschfärbiges auge, das oft mit einem braunen gepaart ist, dergleichen pferde zuweilen haben' brem.-ndsächs. wb. 2, 515, vgl. dazu glaszaugen [7,7672] des yeux verons ou verrons, oculi varii, variis coloribus praediti, quales equi nonnulli habent DUEZ dict. (1664) 2, 202; als fester ausdruck durchstehend, vgl. dazu im ahd. als adjectivbildung glesenoger glaucus (als bezeichnung für ein pferd) ahd. gloss. 3, 684, 34 St.-S.; vgl. ags. glæseneáge glaucus bei BOSWORTH-TOLLER suppl. 474a (glossar d. 11. jhs.), sowie im as. glasa glaucus (equus) WADSTEIN 109a (glosse zu: glaucus vero est veluti pictos oculos habens et quodam splendore perfusos Isidor XII 1, 50); zufrühst mnd. bezeugt: eyn brune plesseke und eyn swart mit tzween glasseogen (Schwerin v. j. 1517) bei SCHILLER-LÜBBEN 2, 117b. im hd.: die glasz- oder burgaugen (s. birgauge teil 2, 38) sind nimmermehr gut, ob wol dieselbigen rosz ... fast hurtig werden ... diese farb ist von den obern (lichtbraunen, schwarzen, grauen augen) in dem unterschiedlich, dasz sie vil weiszer sind M. V. FUGGER gestüterey (1584) 50a; die weiszen augen sehen wol in duncklen orten und bey warmen wetter, wenig aber in kaltem schneegewitter, und die bey nacht scharff sehen (wie die bürg- und glasaugen), die sehen bey tages desto weniger V. HOHBERG georg. curios. (1682) 2, 133; glas- oder bürgaugen, sonderlich wann diese augen einander nicht gleich sind ebda 132b;

> ein pferd, das für das schwarz viel weisz in augen hat,
> nicht sihet allzu scharff im schnee und abends spat.
> auf zweygeäugtem gaul, der sonst ein glasaug führt,
> ein gutes spornenbaar und ochsenzenn gebührt
> V. STUBENBERG bei HOHBERG a. a. o. 131;

Oppianus will ... zur löwenjagt ein solch rosz, das gläntzende glaszaugen hat J. SINAPIUS silvula venatoria (1678) 38; das glasauge (beim pferde), welches eine porzellänfarbe, bläulich, gräulich und weisz untereinander hat, ist eines der gesündesten augen bunzlauische monatsschrift 7 (1780) 45. – von glänzendem, feurigem auge: (die leoparden) haben ein langen leyb mit roten gleszaugen gleych als ob sy fheürin wärind HEROLD-FORER Gesners thierbuch (1563) 105a; ebenso mundartlich als glasauge STAUB-TOBLER 1, 136. – anders für ein starrglotzendes, hervorstehendes auge, beim menschen: auch hat es (das mägdlein) grosze bausende glaszaugen

6.0 Conclusion: Runes in context

This symposium deals with "Runes in Context," so that it behooves me to consider this question for my work with runes and the blind. For me, what I am looking at is the use of a writing system in the context of its real world users. Put differently, the runes were in use in a wide area for a very long time. Within that area we have clear evidence of blindness or loss of vision to a significant degree. Aside from the textual materials I have noted, it is common sense to assume that the a certain percentage of the older Germanic populace would either have been born blind or through injury or illness loss sight to a significant degree.

It is also clear, that chances are good that over the thousand plus years of runic use, there will have been persons literate in runes who will have lost their sight. In literature, we have the case of Egill Skallagrímsson. If we look at the runes from Bergen, we have clear evidence of comparatively widespread runic literacy. It beggers the imagination that at least some of these visually impaired persons wouldn't have continued to make some use of their runic knowledge.

Interesting is also the idea that in situations where information needs to be passed on clandestinely, inscribed runes might serve this function, just as the dotted system Braille is based on helped conceal officers in the field.

The shortness of runic inscriptions in general, their shape and mode of production on wood, and their social importance all suggest that persons with runic knowledge might very well have continued to make and to interpret runes.

The parallels between modification of runes over time from their original alphabet and the ways that Latin letters have been modified for tactile writing systems in the modern period are tantalizing but remain for the present mere

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gehabt, welche im weit herausz für dem kopff gelegen, darinnen der augapffel fast eitel sehe, wenig aber weiszes vorhanden gewest M. CHR. IRENÄUS wundergeburten (1584) P 3a; er ist ein kleiner alter gebückter mann mit einem entsetzlich dicken kopfe und hervorstehenden glasaugen E. T. A. HOFFMANN briefwechsel 2, 135 M.; vgl. s. w. 7, 240 Gr.; wo was zu fischen ist, haben sie (die Basler) es am angel, ehe ein Engländer seine glasaugen aufmacht J. GOTTHELF ges. schr. (1855) 17, 201. mundartlich glässauge 'glotzauge' FISCHER schwäb. 3, 671; auch als schelte für einen glotzäugigen ebda, ebenso glasooge SCHÜTZE holst. id. (1800) 2, 36. bei trunkenheit: er hat glasaugen W. KÖRTE sprichwörter (1837) 527. vgl. gläsern 2.

parallels.

My initial work with Brad Blair has shown that it is quite possible to read runes at some level of proficiency with NO special modification of letters or of writing practices from what would have been used over much of the period of runic writing.

What I have NOT shown is clear proof of actual runic production/reading by the blind. However, I believe that this work can be valuable in opening our eyes to a section of the older Germanic world that we frequently neglect and in motivating us to ask questions that have previously not been posed. It is work in progress.

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