

The allrunes Font and Package.

Version 2.1.1

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Abstract

The allrunes font and package is aimed for typesetting runes. It is supposed to cover all the Germanic runes. Separate font families are set up for six main types of runes: Common Germanic, Anglo-Frisian, normal (Scandinavian), short-twig (Scandinavian), staveless (Scandinavian) and medieval (Scandinavian). Within each font family a lot of varieties are supplied. All varieties exists as both Metafont fonts and type1 fonts as well.

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1 Introduction

This package contains the METAFONT source and driver files and type1 files for the allrunes font families, plus a L^AT_EX package to utilize those fonts, along with a number of font definition files, as required by the New Font Selection Scheme (NFSS).

1.1 About the Documentation

The full documentation of this font and package is rather large, something like 187 pages actually. Most of it is the METAFONT programs for the characters for the fonts; to make them visible, just remove the `\OnlyDescription` from the preamble of `allrunes.dtx`.

1.2 Notes on Installation

The information in this documentation can be usefull if you intend to install the allrunes font and package; however, the information herein is somewhat theoretical, more concrete installation instructions can be found in the `README.txt` file. In some TeX-implementations (like MiKTeX) the allrunes fonts and package is part of the distribution; in such cases it is easier to use that, but look at the version numbers; the CTAN-version is guaranteed to be the latest.

2 The Fonts

Both METAFONT source files and type1 font files are supplied. It is recommended to install either just the METAFONT files, or both of them.

2.1 The METAFONT files

Base File and Source Files The names of the base file and the files containing the code for the characters of the allrunes font all starts with the letters `f``r``u`. The next five possible letters reflects what kind of code is contained within the file, e.g., the base file ends in `base`, the file containing the code for the word separators end in `sep`, and so forth.

Font Driver Files The font driver filenames has been chosen to conform to the `fontname` scheme, as far as possible.

The filename all contain the three characters `f``r``u`, where, according to the the `fontname` scheme, `f` stands for *public* and `ru` for *runic*.

Next comes one of the following letters: `c` (*Common Germanic*), `a` (*Anglo-Frisian*), `n` (*Normal*), `t` (*Short-twig*), `l` (*Staveless*) or `m` (*Medieval*) which represents which of the six rune font families it is.

Then comes another letter, which is one of: `l` (*Light face, without lines*), `m` (*Medium, without lines*), `b` (*Bold face, without lines*), `k` (*Light face, with lines*), `n`

(*Medium, with lines*) or *c* (*Bold face, with lines*), which represents the series, and with/without alignment lines.

and finally comes one of following: *s* (*Straight twigs, top twig not lowered*), *n* (*Curved twigs, top twig not lowered*), *r* (*Rounded twigs, top twig not lowered*), *t* (*Straight twigs, top twig lowered*), *m* (*Curved twigs, top twig lowered*) or *q* (*Rounded twigs, top twig lowered*), which represents two kinds of shape — the curvature of the twigs, and the position of the top twig.

The most reasonable place for the `fru*.mf` files provided with this package is in a directory named

`<fonts-base-dir>/source/public/allrunes/`.

This way of naming the font driver files will, if `kpathsea` is in use, put the `fru*.pk` files in

`<fonts-base-dir>/pk/public/allrunes/`

and the `fru*.tfm` files in

`<fonts-base-dir>/tfm/public/allrunes/`.

2.2 The type1 font files

The names of the type1 font files (the `fru*.pfb` files) are identical to the corresponding `fru*.mf` files, with just the suffix exchanged.

The most reasonable place for the `fru*.pfb` files provided with this package is in a directory named

`<fonts-base-dir>/type1/public/allrunes/`.

The type1 font files are generated from the METAFONT font files with the program `mftrace` [Nienhuys 2003].

The map file To be able to use the type1 fonts, programs like `dvips` and `pdflatex` needs information about which `*.pfb` file a certain fontname corresponds to. This information is normally stored in a file `<dvips-base-dir>/config/psfonts.map`, but additional information may reside in other `*.map` files. In the `allrunes` bundle, a such file called `allrunes.map` is supplied. There are several reasonable places for it, but `<fonts-base-dir>/maps/dvips/allrunes` would be fine.

In recent versions of MiKTeX- and `texlive`-implementations, the handling of `*.map` files is rather simple. You have to update the filename database and you have to add a reference to the `allrunes.map` file, and update the depending `*.map` files. How to do this can differ a lot in different T_EX-distributions. See the `README.txt` file for concrete examples.

3 The L^AT_EX files

To follow the scheme of the METAFONT files, it would be appropriate to place all L^AT_EX files, namely the `ar?.fd` and the `allrunes.sty` files, in

`<tex-base-dir>/tex/latex/allrunes/`.

(low twigs). The default is high twigs. This parameter has a slightly different meaning for the staveless runes.

```
\texthi{text} \hightwigs 𐀀𐀁𐀂𐀃𐀄𐀅𐀆𐀇𐀈𐀉𐀊𐀋𐀌𐀍𐀎𐀏𐀐𐀑𐀒𐀓𐀔𐀕𐀖𐀗𐀘𐀙𐀚𐀛𐀜𐀝𐀞𐀟𐀠𐀡𐀢𐀣𐀤𐀥𐀦𐀧𐀨𐀩𐀪𐀫𐀬𐀭𐀮𐀯𐀰𐀱𐀲𐀳𐀴𐀵𐀶𐀷𐀸𐀹𐀺𐀻𐀼𐀽𐀾𐀿𐁀𐁁𐁂𐁃𐁄𐁅𐁆𐁇𐁈𐁉𐁊𐁋𐁌𐁍𐁎𐁏𐁐𐁑𐁒𐁓𐁔𐁕𐁖𐁗𐁘𐁙𐁚𐁛𐁜𐁝𐁞𐁟𐁠𐁡𐁢𐁣𐁤𐁥𐁦𐁧𐁨𐁩𐁪𐁫𐁬𐁭𐁮𐁯𐁰𐁱𐁲𐁳𐁴𐁵𐁶𐁷𐁸𐁹𐁺𐁻𐁼𐁽𐁾𐁿𐂀𐂁𐂂𐂃𐂄𐂅𐂆𐂇𐂈𐂉𐂊𐂋𐂌𐂍𐂎𐂏𐂐𐂑𐂒𐂓𐂔𐂕𐂖𐂗𐂘𐂙𐂚𐂛𐂜𐂝𐂞𐂟𐂠𐂡𐂢𐂣𐂤𐂥𐂦𐂧𐂨𐂩𐂪𐂫𐂬𐂭𐂮𐂯𐂰𐂱𐂲𐂳𐂴𐂵𐂶𐂷𐂸𐂹𐂺𐂻𐂼𐂽𐂾𐂿𐃀𐃁𐃂𐃃𐃄𐃅𐃆𐃇𐃈𐃉𐃊𐃋𐃌𐃍𐃎𐃏𐃐𐃑𐃒𐃓𐃔𐃕𐃖𐃗𐃘𐃙𐃚𐃛𐃜𐃝𐃞𐃟𐃠𐃡𐃢𐃣𐃤𐃥𐃦𐃧𐃨𐃩𐃪𐃫𐃬𐃭𐃮𐃯𐃰𐃱𐃲𐃳𐃴𐃵𐃶𐃷𐃸𐃹𐃺𐃻𐃼𐃽𐃾𐃿𐄀𐄁𐄂𐄃𐄄𐄅𐄆𐄇𐄈𐄉𐄊𐄋𐄌𐄍𐄎𐄏𐄐𐄑𐄒𐄓𐄔𐄕𐄖𐄗𐄘𐄙𐄚𐄛𐄜𐄝𐄞𐄟𐄠𐄡𐄢𐄣𐄤𐄥𐄦𐄧𐄨𐄩𐄪𐄫𐄬𐄭𐄮𐄯𐄰𐄱𐄲𐄳𐄴𐄵𐄶𐄷𐄸𐄹𐄺𐄻𐄼𐄽𐄾𐄿𐅀𐅁𐅂𐅃𐅄𐅅𐅆𐅇𐅈𐅉𐅊𐅋𐅌𐅍𐅎𐅏𐅐𐅑𐅒𐅓𐅔𐅕𐅖𐅗𐅘𐅙𐅚𐅛𐅜𐅝𐅞𐅟𐅠𐅡𐅢𐅣𐅤𐅥𐅦𐅧𐅨𐅩𐅪𐅫𐅬𐅭𐅮𐅯𐅰𐅱𐅲𐅳𐅴𐅵𐅶𐅷𐅸𐅹𐅺𐅻𐅼𐅽𐅾𐅿𐆀𐆁𐆂𐆃𐆄𐆅𐆆𐆇𐆈𐆉𐆊𐆋𐆌𐆍𐆎𐆏𐆐𐆑𐆒𐆓𐆔𐆕𐆖𐆗𐆘𐆙𐆚𐆛𐆜𐆝𐆞𐆟𐆠𐆡𐆢𐆣𐆤𐆥𐆦𐆧𐆨𐆩𐆪𐆫𐆬𐆭𐆮𐆯𐆰𐆱𐆲𐆳𐆴𐆵𐆶𐆷𐆸𐆹𐆺𐆻𐆼𐆽𐆾𐆿𐇀𐇁𐇂𐇃𐇄𐇅𐇆𐇇𐇈𐇉𐇊𐇋𐇌𐇍𐇎𐇏𐇐𐇑𐇒𐇓𐇔𐇕𐇖𐇗𐇘𐇙𐇚𐇛𐇜𐇝𐇞𐇟𐇠𐇡𐇢𐇣𐇤𐇥𐇦𐇧𐇨𐇩𐇪𐇫𐇬𐇭𐇮𐇯𐇰𐇱𐇲𐇳𐇴𐇵𐇶𐇷𐇸𐇹𐇺𐇻𐇼𐇽𐇾𐇿𐈀𐈁𐈂𐈃𐈄𐈅𐈆𐈇𐈈𐈉𐈊𐈋𐈌𐈍𐈎𐈏𐈐𐈑𐈒𐈓𐈔𐈕𐈖𐈗𐈘𐈙𐈚𐈛𐈜𐈝𐈞𐈟𐈠𐈡𐈢𐈣𐈤𐈥𐈦𐈧𐈨𐈩𐈪𐈫𐈬𐈭𐈮𐈯𐈰𐈱𐈲𐈳𐈴𐈵𐈶𐈷𐈸𐈹𐈺𐈻𐈼𐈽𐈾𐈿𐉀𐉁𐉂𐉃𐉄𐉅𐉆𐉇𐉈𐉉𐉊𐉋𐉌𐉍𐉎𐉏𐉐𐉑𐉒𐉓𐉔𐉕𐉖𐉗𐉘𐉙𐉚𐉛𐉜𐉝𐉞𐉟𐉠𐉡𐉢𐉣𐉤𐉥𐉦𐉧𐉨𐉩𐉪𐉫𐉬𐉭𐉮𐉯𐉰𐉱𐉲𐉳𐉴𐉵𐉶𐉷𐉸𐉹𐉺𐉻𐉼𐉽𐉾𐉿𐊀𐊁𐊂𐊃𐊄𐊅𐊆𐊇𐊈𐊉𐊊𐊋𐊌𐊍𐊎𐊏𐊐𐊑𐊒𐊓𐊔𐊕𐊖𐊗𐊘𐊙𐊚𐊛𐊜𐊝𐊞𐊟𐊠𐊡𐊢𐊣𐊤𐊥𐊦𐊧𐊨𐊩𐊪𐊫𐊬𐊭𐊮𐊯𐊰𐊱𐊲𐊳𐊴𐊵𐊶𐊷𐊸𐊹𐊺𐊻𐊼𐊽𐊾𐊿𐋀𐋁𐋂𐋃𐋄𐋅𐋆𐋇𐋈𐋉𐋊𐋋𐋌𐋍𐋎𐋏𐋐𐋑𐋒𐋓𐋔𐋕𐋖𐋗𐋘𐋙𐋚𐋛𐋜𐋝𐋞𐋟𐋠𐋡𐋢𐋣𐋤𐋥𐋦𐋧𐋨𐋩𐋪𐋫𐋬𐋭𐋮𐋯𐋰𐋱𐋲𐋳𐋴𐋵𐋶𐋷𐋸𐋹𐋺𐋻𐋼𐋽𐋾𐋿𐌀𐌁𐌂𐌃𐌄𐌅𐌆𐌇𐌈𐌉𐌊𐌋𐌌𐌍𐌎𐌏𐌐𐌑𐌒𐌓𐌔𐌕𐌖𐌗𐌘𐌙𐌚𐌛𐌜𐌝𐌞𐌟𐌠𐌡𐌢𐌣𐌤𐌥𐌦𐌧𐌨𐌩𐌪𐌫𐌬𐌭𐌮𐌯𐌰𐌱𐌲𐌳𐌴𐌵𐌶𐌷𐌸𐌹𐌺𐌻𐌼𐌽𐌾𐌿𐍀𐍁𐍂𐍃𐍄𐍅𐍆𐍇𐍈𐍉𐍊𐍋𐍌𐍍𐍎𐍏𐍐𐍑𐍒𐍓𐍔𐍕𐍖𐍗𐍘𐍙𐍚𐍛𐍜𐍝𐍞𐍟𐍠𐍡𐍢𐍣𐍤𐍥𐍦𐍧𐍨𐍩𐍪𐍫𐍬𐍭𐍮𐍯𐍰𐍱𐍲𐍳𐍴𐍵𐍶𐍷𐍸𐍹𐍺𐍻𐍼𐍽𐍾𐍿𐎀𐎁𐎂𐎃𐎄𐎅𐎆𐎇𐎈𐎉𐎊𐎋𐎌𐎍𐎎𐎏𐎐𐎑𐎒𐎓𐎔𐎕𐎖𐎗𐎘𐎙𐎚𐎛𐎜𐎝𐎞𐎟𐎠𐎡𐎢𐎣𐎤𐎥𐎦𐎧𐎨𐎩𐎪𐎫𐎬𐎭𐎮𐎯𐎰𐎱𐎲𐎳𐎴𐎵𐎶𐎷𐎸𐎹𐎺𐎻𐎼𐎽𐎾𐎿𐏀𐏁𐏂𐏃𐏄𐏅𐏆𐏇𐏈𐏉𐏊𐏋𐏌𐏍𐏎𐏏𐏐𐏑𐏒𐏓𐏔𐏕𐏖𐏗𐏘𐏙𐏚𐏛𐏜𐏝𐏞𐏟𐏠𐏡𐏢𐏣𐏤𐏥𐏦𐏧𐏨𐏩𐏪𐏫𐏬𐏭𐏮𐏯𐏰𐏱𐏲𐏳𐏴𐏵𐏶𐏷𐏸𐏹𐏺𐏻𐏼𐏽𐏾𐏿𐐀𐐁𐐂𐐃𐐄𐐅𐐆𐐇𐐈𐐉𐐊𐐋𐐌𐐍𐐎𐐏𐐐𐐑𐐒𐐓𐐔𐐕𐐖𐐗𐐘𐐙𐐚𐐛𐐜𐐝𐐞𐐟𐐠𐐡𐐢𐐣𐐤𐐥𐐦𐐧𐐨𐐩𐐪𐐫𐐬𐐭𐐮𐐯𐐰𐐱𐐲𐐳𐐴𐐵𐐶𐐷𐐸𐐹𐐺𐐻𐐼𐐽𐐾𐐿𐑀𐑁𐑂𐑃𐑄𐑅𐑆𐑇𐑈𐑉𐑊𐑋𐑌𐑍𐑎𐑏𐑐𐑑𐑒𐑓𐑔𐑕𐑖𐑗𐑘𐑙𐑚𐑛𐑜𐑝𐑞𐑟𐑠𐑡𐑢𐑣𐑤𐑥𐑦𐑧𐑨𐑩𐑪𐑫𐑬𐑭𐑮𐑯𐑰𐑱𐑲𐑳𐑴𐑵𐑶𐑷𐑸𐑹𐑺𐑻𐑼𐑽𐑾𐑿𐒀𐒁𐒂𐒃𐒄𐒅𐒆𐒇𐒈𐒉𐒊𐒋𐒌𐒍𐒎𐒏𐒐𐒑𐒒𐒓𐒔𐒕𐒖𐒗𐒘𐒙𐒚𐒛𐒜𐒝𐒞𐒟𐒠𐒡𐒢𐒣𐒤𐒥𐒦𐒧𐒨𐒩𐒪𐒫𐒬𐒭𐒮𐒯𐒰𐒱𐒲𐒳𐒴𐒵𐒶𐒷𐒸𐒹𐒺𐒻𐒼𐒽𐒾𐒿𐓀𐓁𐓂𐓃𐓄𐓅𐓆𐓇𐓈𐓉𐓊𐓋𐓌𐓍𐓎𐓏𐓐𐓑𐓒𐓓𐓔𐓕𐓖𐓗𐓘𐓙𐓚𐓛𐓜𐓝𐓞𐓟𐓠𐓡𐓢𐓣𐓤𐓥𐓦𐓧𐓨𐓩𐓪𐓫𐓬𐓭𐓮𐓯𐓰𐓱𐓲𐓳𐓴𐓵𐓶𐓷𐓸𐓹𐓺𐓻𐓼𐓽𐓾𐓿𐔀𐔁𐔂𐔃𐔄𐔅𐔆𐔇𐔈𐔉𐔊𐔋𐔌𐔍𐔎𐔏𐔐𐔑𐔒𐔓𐔔𐔕𐔖𐔗𐔘𐔙𐔚𐔛𐔜𐔝𐔞𐔟𐔠𐔡𐔢𐔣𐔤𐔥𐔦𐔧𐔨𐔩𐔪𐔫𐔬𐔭𐔮𐔯𐔰𐔱𐔲𐔳𐔴𐔵𐔶𐔷𐔸𐔹𐔺𐔻𐔼𐔽𐔾𐔿𐕀𐕁𐕂𐕃𐕄𐕅𐕆𐕇𐕈𐕉𐕊𐕋𐕌𐕍𐕎𐕏𐕐𐕑𐕒𐕓𐕔𐕕𐕖𐕗𐕘𐕙𐕚𐕛𐕜𐕝𐕞𐕟𐕠𐕡𐕢𐕣𐕤𐕥𐕦𐕧𐕨𐕩𐕪𐕫𐕬𐕭𐕮𐕯𐕰𐕱𐕲𐕳𐕴𐕵𐕶𐕷𐕸𐕹𐕺𐕻𐕼𐕽𐕾𐕿𐖀𐖁𐖂𐖃𐖄𐖅𐖆𐖇𐖈𐖉𐖊𐖋𐖌𐖍𐖎𐖏𐖐𐖑𐖒𐖓𐖔𐖕𐖖𐖗𐖘𐖙𐖚𐖛𐖜𐖝𐖞𐖟𐖠𐖡𐖢𐖣𐖤𐖥𐖦𐖧𐖨𐖩𐖪𐖫𐖬𐖭𐖮𐖯𐖰𐖱𐖲𐖳𐖴𐖵𐖶𐖷𐖸𐖹𐖺𐖻𐖼𐖽𐖾𐖿𐗀𐗁𐗂𐗃𐗄𐗅𐗆𐗇𐗈𐗉𐗊𐗋𐗌𐗍𐗎𐗏𐗐𐗑𐗒𐗓𐗔𐗕𐗖𐗗𐗘𐗙𐗚𐗛𐗜𐗝𐗞𐗟𐗠𐗡𐗢𐗣𐗤𐗥𐗦𐗧𐗨𐗩𐗪𐗫𐗬𐗭𐗮𐗯𐗰𐗱𐗲𐗳𐗴𐗵𐗶𐗷𐗸𐗹𐗺𐗻𐗼𐗽𐗾𐗿𐘀𐘁𐘂𐘃𐘄𐘅𐘆𐘇𐘈𐘉𐘊𐘋𐘌𐘍𐘎𐘏𐘐𐘑𐘒𐘓𐘔𐘕𐘖𐘗𐘘𐘙𐘚𐘛𐘜𐘝𐘞𐘟𐘠𐘡𐘢𐘣𐘤𐘥𐘦𐘧𐘨𐘩𐘪𐘫𐘬𐘭𐘮𐘯𐘰𐘱𐘲𐘳𐘴𐘵𐘶𐘷𐘸𐘹𐘺𐘻𐘼𐘽𐘾𐘿𐙀𐙁𐙂𐙃𐙄𐙅𐙆𐙇𐙈𐙉𐙊𐙋𐙌𐙍𐙎𐙏𐙐𐙑𐙒𐙓𐙔𐙕𐙖𐙗𐙘𐙙𐙚𐙛𐙜𐙝𐙞𐙟𐙠𐙡𐙢𐙣𐙤𐙥𐙦𐙧𐙨𐙩𐙪𐙫𐙬𐙭𐙮𐙯𐙰𐙱𐙲𐙳𐙴𐙵𐙶𐙷𐙸𐙹𐙺𐙻𐙼𐙽𐙾𐙿𐚀𐚁𐚂𐚃𐚄𐚅𐚆𐚇𐚈𐚉𐚊𐚋𐚌𐚍𐚎𐚏𐚐𐚑𐚒𐚓𐚔𐚕𐚖𐚗𐚘𐚙𐚚𐚛𐚜𐚝𐚞𐚟𐚠𐚡𐚢𐚣𐚤𐚥𐚦𐚧𐚨𐚩𐚪𐚫𐚬𐚭𐚮𐚯𐚰𐚱𐚲𐚳𐚴𐚵𐚶𐚷𐚸𐚹𐚺𐚻𐚼𐚽𐚾𐚿𐛀𐛁𐛂𐛃𐛄𐛅𐛆𐛇𐛈𐛉𐛊𐛋𐛌𐛍𐛎𐛏𐛐𐛑𐛒𐛓𐛔𐛕𐛖𐛗𐛘𐛙𐛚𐛛𐛜𐛝𐛞𐛟𐛠𐛡𐛢𐛣𐛤𐛥𐛦𐛧𐛨𐛩𐛪𐛫𐛬𐛭𐛮𐛯𐛰𐛱𐛲𐛳𐛴𐛵𐛶𐛷𐛸𐛹𐛺𐛻𐛼𐛽𐛾𐛿𐜀𐜁𐜂𐜃𐜄𐜅𐜆𐜇𐜈𐜉𐜊𐜋𐜌𐜍𐜎𐜏𐜐𐜑𐜒𐜓𐜔𐜕𐜖𐜗𐜘𐜙𐜚𐜛𐜜𐜝𐜞𐜟𐜠𐜡𐜢𐜣𐜤𐜥𐜦𐜧𐜨𐜩𐜪𐜫𐜬𐜭𐜮𐜯𐜰𐜱𐜲𐜳𐜴𐜵𐜶𐜷𐜸𐜹𐜺𐜻𐜼𐜽𐜾𐜿𐝀𐝁𐝂𐝃𐝄𐝅𐝆𐝇𐝈𐝉𐝊𐝋𐝌𐝍𐝎𐝏𐝐𐝑𐝒𐝓𐝔𐝕𐝖𐝗𐝘𐝙𐝚𐝛𐝜𐝝𐝞𐝟𐝠𐝡𐝢𐝣𐝤𐝥𐝦𐝧𐝨𐝩𐝪𐝫𐝬𐝭𐝮𐝯𐝰𐝱𐝲𐝳𐝴𐝵𐝶𐝷𐝸𐝹𐝺𐝻𐝼𐝽𐝾𐝿𐞀𐞁𐞂𐞃𐞄𐞅𐞆𐞇𐞈𐞉𐞊𐞋𐞌𐞍𐞎𐞏𐞐𐞑𐞒𐞓𐞔𐞕𐞖𐞗𐞘𐞙𐞚𐞛𐞜𐞝𐞞𐞟𐞠𐞡𐞢𐞣𐞤𐞥𐞦𐞧𐞨𐞩𐞪𐞫𐞬𐞭𐞮𐞯𐞰𐞱𐞲𐞳𐞴𐞵𐞶𐞷𐞸𐞹𐞺𐞻𐞼𐞽𐞾𐞿𐟀𐟁𐟂𐟃𐟄𐟅𐟆𐟇𐟈𐟉𐟊𐟋𐟌𐟍𐟎𐟏𐟐𐟑𐟒𐟓𐟔𐟕𐟖𐟗𐟘𐟙𐟚𐟛𐟜𐟝𐟞𐟟𐟠𐟡𐟢𐟣𐟤𐟥𐟦𐟧𐟨𐟩𐟪𐟫𐟬𐟭𐟮𐟯𐟰𐟱𐟲𐟳𐟴𐟵𐟶𐟷𐟸𐟹𐟺𐟻𐟼𐟽𐟾𐟿𐠀𐠁𐠂𐠃𐠄𐠅𐠆𐠇𐠈𐠉𐠊𐠋𐠌𐠍𐠎𐠏𐠐𐠑𐠒𐠓𐠔𐠕𐠖𐠗𐠘𐠙𐠚𐠛𐠜𐠝𐠞𐠟𐠠𐠡𐠢𐠣𐠤𐠥𐠦𐠧𐠨𐠩𐠪𐠫𐠬𐠭𐠮𐠯𐠰𐠱𐠲𐠳𐠴𐠵𐠶𐠷𐠸𐠹𐠺𐠻𐠼𐠽𐠾𐠿𐡀𐡁𐡂𐡃𐡄𐡅𐡆𐡇𐡈𐡉𐡊𐡋𐡌𐡍𐡎𐡏𐡐𐡑𐡒𐡓𐡔𐡕𐡖𐡗𐡘𐡙𐡚𐡛𐡜𐡝𐡞𐡟𐡠𐡡𐡢𐡣𐡤𐡥𐡦𐡧𐡨𐡩𐡪𐡫𐡬𐡭𐡮𐡯𐡰𐡱𐡲𐡳𐡴𐡵𐡶𐡷𐡸𐡹𐡺𐡻𐡼𐡽𐡾𐡿𐢀𐢁𐢂𐢃𐢄𐢅𐢆𐢇𐢈𐢉𐢊𐢋𐢌𐢍𐢎𐢏𐢐𐢑𐢒𐢓𐢔𐢕𐢖𐢗𐢘𐢙𐢚𐢛𐢜𐢝𐢞𐢟𐢠𐢡𐢢𐢣𐢤𐢥𐢦𐢧𐢨𐢩𐢪𐢫𐢬𐢭𐢮𐢯𐢰𐢱𐢲𐢳𐢴𐢵𐢶𐢷𐢸𐢹𐢺𐢻𐢼𐢽𐢾𐢿𐣀𐣁𐣂𐣃𐣄𐣅𐣆𐣇𐣈𐣉𐣊𐣋𐣌𐣍𐣎𐣏𐣐𐣑𐣒𐣓𐣔𐣕𐣖𐣗𐣘𐣙𐣚𐣛𐣜𐣝𐣞𐣟𐣠𐣡𐣢𐣣𐣤𐣥𐣦𐣧𐣨𐣩𐣪𐣫𐣬𐣭𐣮𐣯𐣰𐣱𐣲𐣳𐣴𐣵𐣶𐣷𐣸𐣹𐣺𐣻𐣼𐣽𐣾𐣿𐤀𐤁𐤂𐤃𐤄𐤅𐤆𐤇𐤈𐤉𐤊𐤋𐤌𐤍𐤎𐤏𐤐𐤑𐤒𐤓𐤔𐤕𐤖𐤗𐤘𐤙𐤚𐤛𐤜𐤝𐤞𐤟𐤠𐤡𐤢𐤣𐤤𐤥𐤦𐤧𐤨𐤩𐤪𐤫𐤬𐤭𐤮𐤯𐤰𐤱𐤲𐤳𐤴𐤵𐤶𐤷𐤸𐤹𐤺𐤻𐤼𐤽𐤾𐤿𐥀𐥁𐥂𐥃𐥄𐥅𐥆𐥇𐥈𐥉𐥊𐥋𐥌𐥍𐥎𐥏𐥐𐥑𐥒𐥓𐥔𐥕𐥖𐥗𐥘𐥙𐥚𐥛𐥜𐥝𐥞𐥟𐥠𐥡𐥢𐥣𐥤𐥥𐥦𐥧𐥨𐥩𐥪𐥫𐥬𐥭𐥮𐥯𐥰𐥱𐥲𐥳𐥴𐥵𐥶𐥷𐥸𐥹𐥺𐥻𐥼𐥽𐥾𐥿𐦀𐦁𐦂𐦃𐦄𐦅𐦆𐦇𐦈𐦉𐦊𐦋𐦌𐦍𐦎𐦏𐦐𐦑𐦒𐦓𐦔𐦕𐦖𐦗𐦘𐦙𐦚𐦛𐦜𐦝𐦞𐦟𐦠𐦡𐦢𐦣𐦤𐦥𐦦𐦧𐦨𐦩𐦪𐦫𐦬𐦭𐦮𐦯𐦰𐦱𐦲𐦳𐦴𐦵𐦶𐦷𐦸𐦹𐦺𐦻𐦼𐦽𐦾𐦿𐧀𐧁𐧂𐧃𐧄𐧅𐧆𐧇𐧈𐧉𐧊𐧋𐧌𐧍𐧎𐧏𐧐𐧑𐧒𐧓𐧔𐧕𐧖𐧗𐧘𐧙𐧚𐧛𐧜𐧝𐧞𐧟𐧠𐧡𐧢𐧣𐧤𐧥𐧦𐧧𐧨𐧩𐧪𐧫𐧬𐧭𐧮𐧯𐧰𐧱𐧲𐧳𐧴𐧵𐧶𐧷𐧸𐧹𐧺𐧻𐧼𐧽𐧾𐧿𐨀𐨁𐨂𐨃𐨄𐨅𐨆𐨇𐨈𐨉𐨊𐨋𐨌𐨍𐨎𐨏𐨐𐨑𐨒𐨓𐨔𐨕𐨖𐨗𐨘𐨙𐨚𐨛𐨜𐨝𐨞𐨟𐨠𐨡𐨢𐨣𐨤𐨥𐨦𐨧𐨨𐨩𐨪𐨫𐨬𐨭𐨮𐨯𐨰𐨱𐨲𐨳𐨴𐨵𐨶𐨷𐨹𐨺𐨸𐨻𐨼𐨽𐨾𐨿𐩀𐩁𐩂𐩃𐩄𐩅𐩆𐩇𐩈𐩉𐩊𐩋𐩌𐩍𐩎𐩏𐩐𐩑𐩒𐩓𐩔𐩕𐩖𐩗𐩘𐩙𐩚𐩛𐩜𐩝𐩞𐩟𐩠𐩡𐩢𐩣𐩤𐩥𐩦𐩧𐩨𐩩𐩪𐩫𐩬𐩭𐩮𐩯𐩰𐩱𐩲𐩳𐩴𐩵𐩶𐩷𐩸𐩹𐩺𐩻𐩼𐩽𐩾𐩿𐪀𐪁𐪂𐪃𐪄𐪅𐪆𐪇𐪈𐪉𐪊𐪋𐪌𐪍𐪎𐪏𐪐𐪑𐪒𐪓𐪔𐪕𐪖𐪗𐪘𐪙𐪚𐪛𐪜𐪝𐪞𐪟𐪠𐪡𐪢𐪣𐪤𐪥𐪦𐪧𐪨𐪩𐪪𐪫𐪬𐪭𐪮𐪯𐪰𐪱𐪲𐪳𐪴𐪵𐪶𐪷𐪸𐪹𐪺𐪻𐪼𐪽𐪾𐪿𐫀𐫁𐫂𐫃𐫄𐫅𐫆𐫇𐫈𐫉𐫊𐫋𐫌𐫍𐫎𐫏𐫐𐫑𐫒𐫓𐫔𐫕𐫖𐫗𐫘𐫙𐫚𐫛𐫜𐫝𐫞𐫟𐫠𐫡𐫢𐫣𐫤𐫦𐫥𐫧𐫨𐫩𐫪𐫫𐫬𐫭𐫮𐫯𐫰𐫱𐫲𐫳𐫴𐫵𐫶𐫷𐫸𐫹𐫺𐫻𐫼𐫽𐫾𐫿𐬀𐬁𐬂𐬃𐬄𐬅𐬆𐬇𐬈𐬉𐬊𐬋𐬌𐬍𐬎𐬏𐬐𐬑𐬒𐬓𐬔𐬕𐬖𐬗𐬘𐬙𐬚𐬛𐬜𐬝𐬞𐬟𐬠𐬡𐬢𐬣𐬤𐬥𐬦𐬧𐬨𐬩𐬪𐬫𐬬𐬭𐬮𐬯𐬰𐬱𐬲𐬳𐬴𐬵𐬶𐬷𐬸𐬹𐬺𐬻𐬼𐬽𐬾𐬿𐭀𐭁𐭂𐭃𐭄𐭅𐭆𐭇𐭈𐭉𐭊𐭋𐭌𐭍𐭎𐭏𐭐𐭑𐭒𐭓𐭔𐭕𐭖𐭗𐭘𐭙𐭚𐭛𐭜𐭝𐭞𐭟𐭠𐭡𐭢𐭣𐭤𐭥𐭦𐭧𐭨𐭩𐭪𐭫𐭬𐭭𐭮𐭯𐭰𐭱𐭲𐭳𐭴𐭵𐭶𐭷𐭸𐭹𐭺𐭻𐭼𐭽𐭾𐭿𐮀𐮁𐮂𐮃𐮄𐮅𐮆𐮇𐮈𐮉𐮊𐮋𐮌𐮍𐮎𐮏𐮐𐮑𐮒𐮓𐮔𐮕𐮖𐮗𐮘𐮙𐮚𐮛𐮜𐮝𐮞𐮟𐮠𐮡𐮢𐮣𐮤𐮥𐮦𐮧𐮨𐮩𐮪𐮫𐮬𐮭𐮮𐮯𐮰𐮱𐮲𐮳𐮴𐮵𐮶𐮷𐮸𐮹𐮺𐮻𐮼𐮽𐮾𐮿𐯀𐯁𐯂𐯃𐯄𐯅𐯆𐯇𐯈𐯉𐯊𐯋𐯌𐯍𐯎𐯏𐯐𐯑𐯒𐯓𐯔𐯕𐯖𐯗𐯘𐯙𐯚𐯛𐯜𐯝𐯞𐯟𐯠𐯡𐯢𐯣𐯤𐯥𐯦𐯧𐯨𐯩𐯪𐯫𐯬𐯭𐯮𐯯𐯰𐯱𐯲𐯳𐯴𐯵𐯶𐯷𐯸𐯹𐯺𐯻𐯼
```

This resulting package — `allrunes` — is of course a compromise between all three of the principles above:

First there is a font family for each of the six main type of runes used: Common Germanic, Anglo-Frisian, normal (Scandinavian), short-twig (Scandinavian), staveless (Scandinavian), medieval (Scandinavian). For each font family there is a default shape/serie that is essentially identical to the most common types. Then there exist a few different shapes/series: bold/medium/light, with lines/without lines, straight/normal/rounded twigs and normal/lowered top twig, each of which is typographically consistent. (Which of course will result in quite a few runes that never have occurred in real inscriptions.) Within each font family all clearly distinguishable forms are defined, and together with all the typographical varieties ($6 * 3 * 2 * 3 * 2 = 216$), this mimics a lot of the existing varieties.

4.1 The font families

The partitioning of the runes in six main types is of course not undisputable. Having just one font family with all runes would have some definite advantages, i.e. runic characters that always had the same appearance wouldn't need to be duplicated. On the other hand, runic characters that did change their appearance through time and space would need rather cumbersome names to be called upon with. So, how to partition then? The distinction between the older futhark with 24 characters, and the younger (Scandinavian) with 16, is obvious. Also, the younger futhark have three well recognized subfutharks, the normal, the short-twig, and the staveless futhark [Jansson 1987]. The runes from England and Frisia, stands out from the main older futhark, with a few extra runes, 28 or 33 all in all, as another obvious partition [Page 1999]. That's the five easy ones.

In Scandinavia the runes continued to thrive and develop well into the medieval period. The normal runes were complemented, not with new runes (well only very few, and not commonly recognized), but mostly with "dotted" runes. In the 12th century there were runes for all Scandinavian letters, around 29 ones, but the futhark were still considered to contain only 16 characters! Today, most runologists therefore set up an anachronistic alphabet with both dotted and undotted runes. Unfortunately there were some diversification. Some runes appeared only in Greenland, Iceland, Orkney, or Gotland — and in the isolated province of Dalarna in Sweden a mix of runes and Latin letters was used into the 19th century. Five more medieval runic alphabets? Or one medieval runic alphabet containing several runes that never occurred together? I chose the later one, but excluded the mixed runes from Dalarna. That makes six.

When looking at the older futhark in close detail one can find a lot of different forms: the Scandinavian-Gothic 175-400, the Scandinavian 400-750, the Continental 400-750, the Frisian 400-750, the Anglo-Saxon 400-650 and the Anglo-Saxon 650-1100 [Odenstedt 1990], [Parsons 1999]. Here at least two font families are needed, one for the main one, and one for the Anglo-Frisian. But where to draw the line? The Frisian runes are closer to the main ones than to the late English, but they also share some very characteristic runes, not found elsewhere. Similar questions arise for the Continental and Scandinavian runes. When com-

paring the different rune forms listed in [Odenstedt 1990], I have decided to just have the two obvious ones: Common Germanic (i.e. the Continental 400-750, Scandinavian-Gothic 175-400 and Scandinavian 400-750) and the Anglo-Frisian (Frisian 400-750, Anglo-Saxon 400-650 and Anglo-Saxon 650-1100). That makes six font families. I welcome comments.

4.2 Excluded runes

As mentioned above, the mix of medieval runes and Latin letters used in the province of Dalarna in Sweden, is not covered here.

Cryptic or secret runes, f.x. like the different cipher runes on the stone from Rök in Sweden, is not covered. This might change in future releases.

Magic runes is another category of runes. They are mostly varieties from the older futhark, with some features of a rune occurring several times, like the "fir-tree" on the stone from Kylver, which can be interpreted as a ↑-rune with its branches six times repeated. None of those are so far included, but might be in future releases.

Both in inscriptions with the older futhark, and in medieval ones, there are bind-runes or ligatures, mostly in the form of two runes sharing the same main stem. Since there exist really many combinations, I do not try to cover those. An alternative would of course be to cover only those actually occurring in inscriptions.

Finally, there exists several unique runes, known only from one inscription each. Some are included in the `allrunes` package, mainly those who "fit" into the system, and where the uniqueness probably is due to the sparse number of preserved inscriptions. Runes whose uniqueness are due to apparently clumsy or ignorant carvers are most deliberately excluded from the `allrunes` package. In many cases it is hard to decide in which of the two above categories a certain rune belongs to. I might however include some more of those unique runes in future releases.

5 Bugs and shortcomings

In addition to all the for me unknown bugs and shortcomings, there are the following known:

I have not looked at all the runes in all the 216 different forms in different sizes. Some might look less nice, due to errors in the parameterizations. Please tell me if you encounter any.

The `\vflip{}`, `\hflip{}` and the `\turn{}` command can not be used together with commands like `\.` and `\=`. To produce f.x. ¶ you have to write `\hflip{g}`, *not* `\hflip{\.k}`. (That's the reason why all the "dotted" runes have alternative names.) Probably it can be fixed if you use `\DeclareTextComand` instead of `\DeclareTextComposite` (see [L^AT_EXfCPW 1999]), but I didn't really figure out how to do it. Please tell me if you find a reasonable way to handle this.

Perhaps a (virtual) font is needed for the transliteration. A few characters that are needed are not present in the European modern boldface sans serif font, like the **ı** and a suitable uppercase **R**.

I have now supplied kerning information for all the rune font families, but only (almost) for the non-flipped versions. There are simply too many combinations otherwise. As an example of what impact the kerning has, compare:

ƿ|ƿƿƿƿ:ƿƿ|ƿƿ (with kerning) with:

ƿ|ƿƿƿƿ:ƿƿ|ƿƿ (without kerning).

The kerning is set for the default forms, and is by no means adjusted for the other forms. This should only result in displeasing appearances in very few cases, but they need nevertheless to be taken care of (and to be found).

It would be nice to be able to letterspace runes, f.x. with the `soul` package. Unfortunately the `allrunes` and the `soul` package does not work at all together.

Since the same source is used for all fonts, in all sizes, there is no adaptation for discretization problems. Therefore you should not expect fine results on printers with resolution less than 1200 dpi. I find the 12 pt fonts acceptable at 600 dpi, but not the 10 pt ones.

I have cheated to get nonlinear scaling of the fonts. You will therefore sometimes get the "Checksum mismatch" error when generating the pk-files, but that will not cause any problems, as far as I know. When I understand how the driver files for the `ec` font are generated I'll do something similar for the `allrunes` fonts instead.

The `type1` fonts are generated from the `METAFONT` files with the program `mfttrace` [Nienhuys 2003]. No manual adjustment is made and no hinting information is added. This might result in displeasing results, especially for small sizes, but I do not intend to fix such problems, unless it can be automated.

The language of this paper. I'm not a native speaker of English, which you must have understood by now. Please tell me if you find spelling mistakes, grammatical errors, or just plain nonsense in the text.

I'm not a professional runologist, and since I have only read a rather limited amount of runological literature, I might have got a few things wrong. Please tell me if you find anything that looks doubtful.

6 Some examples

In Pforzen, Bayern, Germany, a silver belt buckle was found with the following inscription:

·ƿ|X|ƿ·ƿƿ|ƿ|·ƿƿ|ƿƿ|
 ƿ·ƿƿ|ƿƿ:ƿƿ|ƿƿ·

In Möjbro, Uppland, Sweden, a stone with an inscription and a picture was found. The inscription is written from right to left and from bottom to top:

ƿ
 ƿƿ|X|ƿƿ|ƿƿ|ƿƿ|ƿƿ|
 ƿƿ|ƿƿ|ƿƿ|ƿƿ|

In Torna Hällestad, Skåne, Sweden, three rune stones are set up in the wall of the church. The longest inscription of the three reads as follows:

7 Tables for all the runic characters

On the following pages tables with all the runic characters in all the font families of the allrunes font are listed, together with the most recognized transliteration of each rune, and the corresponding L^AT_EX code in the allrunes package.

The Runic Word Separator Symbols

Separator	L ^A T _E X	
·	\dot	or .
:	\doubledot	or :
⋮	\triplidot	
⋱	\quaddot	
⋰	\pentdot	
·	\eye	or .
:	\doubleeye	or :
⋮	\tripleeye	
⋱	\quadeye	
⋰	\penteye	
	\bar	or !
	\doublebar	
	\triplebar	
+	\plus	or +
++	\doubleplus	
+++	\tripleplus	
*	\cross	or *
**	\doublecross	
***	\triplecross	
*	\star	

The runic writing system had no real punctuation marks, but word separator symbols. To make it simple, all of the symbols in the table above are part of all the six rune font families, listed below.

I have used the * to produce the symbol ⋆ instead of ⋄, which of course had been more consequent. This is because I want to be able to access it, as being one of the most common word separators (together with the ⋮), as a single character.

The Common Germanic Runes

Main runes			Variant forms		
Rune	Translit.	L ^A T _E X	Rune	Translit.	L ^A T _E X
ƒ	f	f	ƒ	f	F
u	u	u	u	u	U
þ	þ	\th or þ			
ǣ	a	a			
ᚱ	r	r			
ƿ	k	k	ƿ	k	\k
			ƿ	k	K
			ƿ	k	\K
X	g	g			
ƿ	w	w			
H	h	h	N	h	H
H	h	\h			
†	n	n			
l	i	i			
ᚿ	j	j	ᚿ	j	\j
			ᚿ	j	J
			ᚿ	A	A
			ᚿ	A	\A
ᚢ	ī or ē	I or i			
ᚦ	p	p	ᚦ	p	\p
			ᚦ	p	P
ᚷ	z or R	R	ᚷ	z or R	\R
			ᚷ	z or R	\RR
ᚺ	s	s or \sfour	ᚺ	s	S or \ssix
			ᚺ	s	\s
			ᚺ	s	\S
			ᚺ	s	\sthree
			ᚺ	s	\sfive
			ᚺ	s	\sseven
			ᚺ	s	\seight
ᚠ	t	t	ᚠ	t	T
ᚪ	b	b	ᚪ	b	B
M	e	e	Π	e	E
ᚱ	m	m			
ᚦ	l	l			
ᚢ	ŋ	\ng or ŋ	ᚢ	ŋ	\NG or D
			ᚢ	ŋ or ij	\ing
			ᚢ	ŋ or ij	\Ing
			ᚢ	ŋ or ij	\ING

The Common Germanic Runes (continued)

Main runes			Variant forms		
Rune	Translit.	L ^A T _E X	Rune	Translit.	L ^A T _E X
ᚾ	d	d	ᚾ	d	\d
ᚿ	o	o	ᚾ	d	D
			ᚿ	i	\i
			ᚿ	a	\a

The main source for the runic characters is [Odenstedt 1990].

Note that the two main forms of the h-rune were not used together. The rune ᚾ was used in Scandinavia, and the rune ᚿ was used on the Continent.

Some of the variant forms have uncertain interpretations. I have chosen just one of the proposed ones. F.x. the ᚿ might be a double ᚿ (w) or a ligature of ᚿ (i) and ᚿ (ᚿ), the ᚿ might be a double ᚿ (b) or a ligature of ᚿ (i) and ᚿ (ᚿ), and the ᚾ might be a peculiar ᚾ (d) or a big ᚾ (ᚿ). See [Odenstedt 1990] for an overview of the arguments.

Of the several zig-zag forms of the s-rune, only a few have occurred in inscriptions, but for the sake of symmetry, forms with all number of strokes from three to eight are included.

The two runes in the last section are from the stone from Rök, from the part of the inscription written with common Germanic runes. They have been put in a separate section here, since being anachronistic, they do not really belong to the common Germanic runes.

The Anglo-Frisian Runes

Main runes			Variant forms		
Rune	Translit.	L ^A T _E X	Rune	Translit.	L ^A T _E X
ƒ	f	f	ƿ	f	F
u	u	u	ʌ	u	U
þ	þ	\th or þ			
o	o	o			
r	r	r			
c	c	c	ʎ	c	\c
g	g	g			
w	w	w			
h	h	h	h	h	\h
			H	h	H
n	n	n			
i	i	i			
j	j	j	ϕ	j	\j
			+	j	J
i	i	I or i			
p	p	p	þ	p(?)	P
x	x	x	ƿ	s	S
s	s	s	ʂ	s	\sthree
			ʃ	s	\sfour
			ʄ	s	\sfive
			ʅ	s	\ssix
			ʆ	s	\sseven
			ʇ	s	\seight
t	t	t			
b	b	b	ƿ	b	B
e	e	e			
m	m	m			
l	l	l			
ŋ	ŋ	\ng or ŋ			
d	d	d	ð	d	\d
			Ð	d	D
œ	œ	\oe or œ	ƿ	œ	\OE or Æ
a	a	a			
æ	æ	\ae or æ			
y	y	y	ƿ	y	\y
			ƿ	y	Y
ea	ea	\ea			

The Normal Runes

Main runes			Dotted runes and variant forms		
Rune	Translit.	L ^A T _E X	Rune	Translit.	L ^A T _E X
ƿ	f	f	ƿ̇	f	F
ᚢ	u	u	ᚢ̇	y	\.u or y
ᚦ	þ	\th or þ	ᚦ̇	þ	\TH or Þ
ᚥ	ǫ	A	ᚥ̇	ǫ	\A
ᚷ	r	r			
ᚹ	k	k	ᚹ̇	g	\.k or g
ᚨ	h	h			
ᚩ	n	n			
ᚪ	i	i	ᚪ̇	e	\.i or e
ᚫ	a	a			
ᚱ	s	s	ᚱ̇	s	S
ᚲ	t	t			
ᚳ	b	b	ᚳ̇	b	B
ᚴ	m	m	ᚴ̇	m	\"m or \m
			ᚴ̈́	m	M
			ᚴ̈́	m	\"M or \M
ᚠ	l	l			
ᚡ	R	R			

The runic characters are compiled from the following sources: [Åhlén 1997], [DRI 1941-1942], [Enoksen 1998], [Jansson 1987] and [Moltke 1985].

The Short-Twig Runes

Main runes			Variant forms		
Rune	Translit.	L ^A T _E X	Rune	Translit.	L ^A T _E X
ƿ	f	f	ƿ	f	F
ᚱ	u	u	ᚱ	u	U
ᚲ	þ	\th or þ	ᚲ	þ	\TH or Þ
ᚳ	a	A	ᚳ	a	\A
ᚴ	r	r			
ᚵ	k	k			
ᚶ	h	h	ᚶ	h	\h
ᚷ	n	n			
ᚸ	i	i			
ᚹ	a	a			
ᚺ	s	s	ᚺ	s	\s
ᚻ	t	t	ᚻ	t	\t
ᚼ	b	b	ᚼ	t	T
ᚾ	m	m	ᚾ	b	\b
			ᚿ	m	\m
ᚿ	l	l	ᚿ	m	M
			ᛀ	l	\l
			ᛁ	l	L
ᚰ	R	R	ᛂ	l	\l
			ᛃ	R	\R

The runic characters are compiled from the following sources: [Enoksen 1998], [Jansson 1987] and [Moltke 1985].

The Staveless Runes

Main runes			Variant forms		
Rune	Translit.	L ^A T _E X	Rune	Translit.	L ^A T _E X
ǀ	f	f			
ǁ	u	u			
ǂ	þ	\th or þ			
ǃ	ǩ	A	ʹ	ǩ	\A
Ǆ	r	r			
ǅ	k	k			
ǆ	h	h			
Ǉ	n	n			
ǈ	i	i			
ǉ	a	a			
Ǌ	s	s			
ǋ	t	t			
ǌ	b	b			
Ǎ	m	m			
ǎ	l	l			
Ǐ	R	R			

The main source for the runic characters is [Peterson 1994].

This font covers the staveless runes known mainly from Hälsingland, Sweden. Other staveless runes occurred in Södermanland, Sweden; they are not covered here.

The rune for **ǩ** has never been found in a typical inscription. Its assumed appearance, ʹ, is based upon the symmetry considerations, and is a rather widely accepted guess. However, in a late Norwegian inscription, the form ʹ was used, p. 244 in [Peterson 1994].

The height of the ǀ, ǁ, ǂ and ǃ runes could vary quite a lot; here only some kind of average form is used.

The Medieval Runes

Main runes			Variant forms		
Rune	Translit.	L ^A T _E X	Rune	Translit.	L ^A T _E X
ᚠ	a	a	ᚠ	a	\a or \.a
			ᚠ	a (or ǣ)	\adot or \'a
			ᚠ	a	A
ᚢ	b	b	ᚢ	b	B
ᚦ	c	c	ᚦ	c	\c or \.c
			ᚦ	c	C or \^c
ᚩ	d	d or \.t	ᚩ	d	\tbar or \=t
			ᚩ	d	\tdot or \'t
			ᚩ	d	\tflag or \~t
			ᚩ	d	\tring or \^t
			ᚩ	d	D or \.T
			ᚩ	d	\D or \"T
ᚱ	e	e or \.i	ᚱ	e	\e or \=i
			ᚱ	e	E or \^i
ᚷ	f	f	ᚷ	f	F
ᚹ	g	g or \.k	ᚹ	g	G or \'k
			ᚹ	g	\g or \=k
ᚺ	h	h	ᚺ	h	\h
			ᚺ	h	H
ᚪ	i	i	ᚪ	i	\i or \.1
ᚫ	k	k	ᚪ	i	\lbar or \=1
ᚬ	l	l	ᚫ	i	\ldot or \'1
			ᚫ	i	\lflag or \~1
			ᚫ	i	\lring or \^1
ᚿ	m	m	ᚿ	m	\m
ᚾ	n	n	ᚾ	n	\n or \.n
			ᚾ	n	\ndot or \'n
			ᚾ	n	N
			ᚾ	n	\N or \.N
ᚠ	o	o	ᚠ	p	\p or \.b
ᚢ	p	p or \"b	ᚢ	p	\P
			ᚢ	p	\Pdots or \"\P
			ᚢ	p	P
ᚦ	q	q	ᚦ	q	\q
			ᚦ	q	\Q
ᚱ	r	r	ᚱ	r	\rdot or \.r
			ᚱ	r	\r

The Medieval Runes (continued)

Main runes			Variant forms		
Rune	Translit.	L ^A T _E X	Rune	Translit.	L ^A T _E X
ᚱ	s	s	ᚱ	s	S
ᚲ	t	t	ᚲ	s	\S
ᚳ	þ	\th or þ	ᚳ	t	T
ᚴ	ð	\dh or ð or \.\th	ᚴ	t	\T
ᚵ	u	u	ᚵ	þ	\TH or Þ
ᚶ	v	v or \.u	ᚶ	þ	\thth
ᚷ	w	w	ᚷ	ð	\DH or Ð or \.\TH
ᚸ	x	x	ᚸ	v	V or \.f
ᚹ	y	y	ᚸ	v	\v or \'f
ᚺ	z	z	ᚸ	v	\V or \~f
ᚻ	æ	ä or æ or \ae	ᚹ	x	\x
ᚼ	ø	\o or ö or ø	ᚹ	x	X
ᚾ	ey or øy	\ey	ᚺ	x	\X
ᚿ		\arlaug	ᚺ	y	Y
ᛀ		\tvimadur	ᚻ	y	v or \.u
ᛁ		\belgthor	ᚻ	y	\y or \"u
ᛂ	j	j	ᚼ	y	\Y or \=u
ᛃ	å	å or \aa	ᚾ	z	\z
			ᚿ	z	Z
			ᛀ	ø	\O or Ö, Ø
			ᛁ	ø	\oo
			ᛂ	ø	\oO

The main source for the medieval runic characters is [Runmärkt 1994], with support from [DRI 1941-1942], [Enoksen 1998], [Jansson 1987], [Moltke 1985] and [Haugen 1996] (despite the claim in the later of "ikke må oppfattast som nokon autoritativ katalog"). Finally, the rune ƕ from Schleswig, is from [Spurkland 1994] and the rune ƕ is from [Larsson 2002].

The table is divided in three sections. First come the "real" runes, as an alphabet, not as an futhark. Next, the three bind-runes that always occurred in rune staves (runic calendars) are listed. Finally come two runes used by, and invented by, a modern Swedish rune carver, Kalle Dahlgren, [Dahlgren 2000] to make it possible to use runes for writing in the Swedish language of today. I put

them here because modern swedish rune carvers essentially use the medieval runes — complemented with these two. However, Kalle Dahlgren has changed his mind, and now uses the ᚠ rune instead of the ᚢ for the letter å.

Note that the runic symbols for c, s and z respectively, were to an large extent interchangeable. In the table above they are however not duplicated.

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