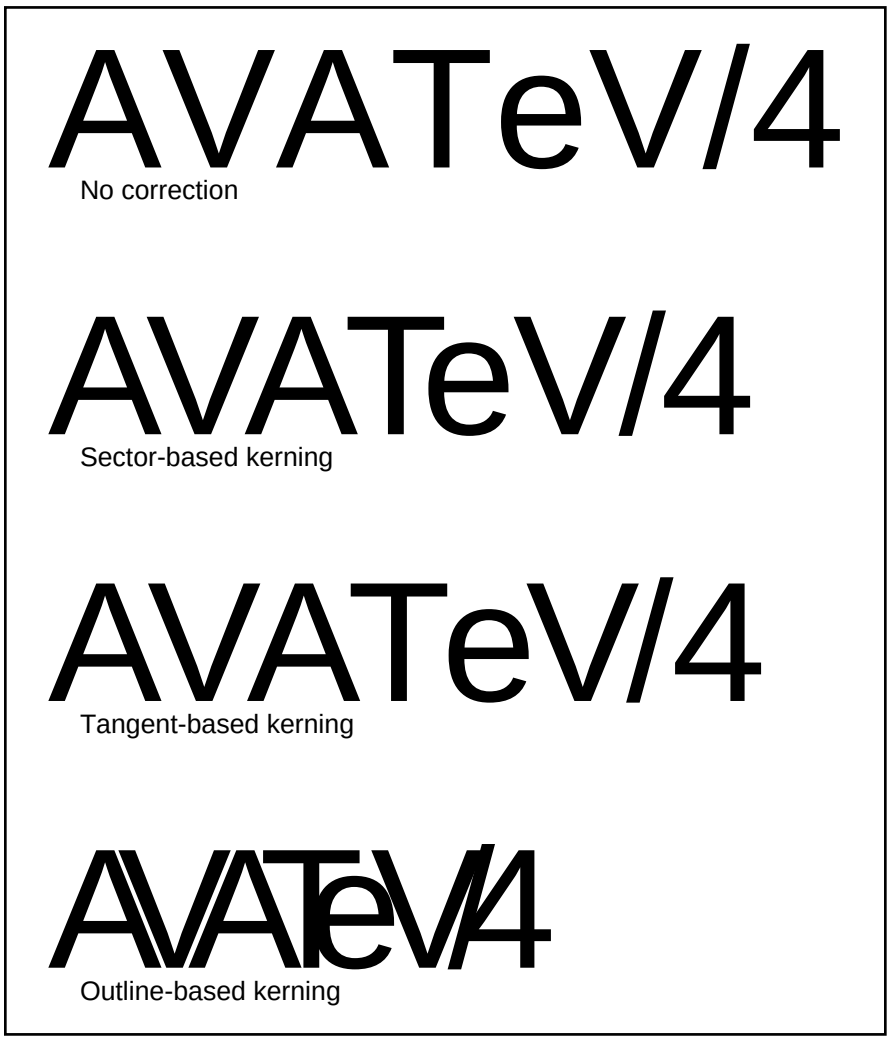
kerndict.ps



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```
%!
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%                                                                              %
% KERNDICT a PostScript dictionary for automatical kerning                     %
%   written by Thomas Baruchel (may 2003)                                      %
%                                                                              %
% Several methods are provided                                                 %
%   * Tangent-based kerning (an idea of the author)                            %
%     45° tangents encapsulate the letter at the right or at the left.         %
%     How far they are from the left or right side of the BoundingBox          %
%     tells what can be done. The method is intended to be very quick.         %
%     Usage : { kernproc } (Hello) kshow                                       %
%                                                                              %
%   * Sector-based kerning (a classical method)                                %
%     The user chooses the length of the smallest horizontal gap               %
%     between the two letters. The number of sectors gives the                 %
%     precision of the computation.                                            %
%     Usage : { 175 12 kernsector } (Hello) kshow                              %
%     Warning : not intended to take account of spaces                         %
%                                                                              %
%   * Outline-based kerning                                                    %
%     The user chooses the real distance between the characters even           %
%     if the two closest points of the outline are not at the same             %
%     height. The user must build an outline version of the font he            %
%     uses before calling the procedure. The /StrokeWidth key of this          %
%     outline font must be set to the expected distance. A number of           %
%     sectors give the precision of the computation.                           %
%     Usage : { /Outline-Font findfont 12 kernoutline } (Hello) kshow          %
%     Warning : not intended to take account of spaces                         %
%                                                                              %
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%

/kerndict 5 dict dup begin
/min { dup 2 index ge { pop } { exch pop } ifelse } bind def
/kerncompute { 1 index 1 index mul 0 ge { abs exch abs min
neg 3 div } { pop pop 0 } ifelse } bind def
/kernproc { gsave (..) dup 0 4 -1 roll put dup 1 4 -1 roll put
currentfont dup /FontMatrix get matrix invertmatrix makefont setfont
newpath 0 0 moveto dup true charpath flattenpath pathbbox pop exch pop
add exch [1 -1 -1 -1 0 0] setmatrix newpath 0 0 moveto true charpath
[1 0 0 1 0 0] setmatrix pathbbox sub 3 index sub 4 1 roll sub sub
grestore kerncompute currentfont /FontMatrix get matrix currentmatrix
exch concat exch 0 rmoveto setmatrix } bind def
/kernsector { matrix currentmatrix currentfont dup dup /FontMatrix get
dup concat gsave newpath matrix invertmatrix makefont setfont /FontBBox
get aload pop 2 {3 index neg} repeat moveto exch 3 index sub 2 mul (.)
dup 0 11 -1 roll put true charpath currentpoint pop (.) dup 0 12 -1 roll
put true charpath currentpoint pop exch flattenpath 0 moveto 3 -1 roll 4
-1 roll sub dup 0 exch rlineto clip dup 7 -1 roll div 0 0 2 index 5 -1
roll { gsave 0 exch 5 index 4 index rectclip clippath pathbbox pop exch
pop sub min grestore } for exch pop add exch pop add 3 -1 roll sub neg
grestore 0 rmoveto setmatrix } bind def
/kernoutline { matrix currentmatrix currentfont /FontMatrix get concat
gsave 3 -1 roll dup /FontMatrix get matrix invertmatrix makefont dup
setfont /FontBBox get aload pop 2 {3 index neg} repeat moveto exch 3
index sub 2 mul (.) dup 0 10 -1 roll put true charpath currentpoint pop
(.) dup 0 11 -1 roll put true charpath currentpoint pop exch flattenpath
0 moveto 3 -1 roll 4 -1 roll sub dup 0 exch rlineto clip dup 7 -1 roll
div 0 0 2 index 5 -1 roll { gsave 0 exch 5 index 4 index rectclip
clippath pathbbox pop exch pop sub min grestore } for exch pop add exch
pop add neg grestore 0 rmoveto setmatrix } bind def
end def
```