Color extensions with the \texttt{xcolor} package — \texttt{pstricks} examples

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\begin{pspicture}(-0.5,-2)(3,2)
cnode(0,0){.5cm}{root}
cnode*[linecolor=red](3,1.5){4pt}{A}
cnode*[linecolor=red!72.5375!blue](3,0){4pt}{B}
cnode*[linecolor=-red](3,-1.5){4pt}{C}
\psset{nodesep=3pt}
\ncline[linecolor=green!50!red]{root}{A}
\ncline[linecolor=blue]{root}{B}
\ncline[linecolor=-green!50!red]{root}{C}
\end{pspicture}

\begin{pspicture}(4,1)
\psframe[fillstyle=slope,
slopeangle=30,
slopebegin=red!72.5375!blue,
slopeed=red!72.5375!blue](4,1)
\end{pspicture}

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Figure 1: Modified version of an example from the \texttt{pstricks} manual; requires \texttt{pst-tree}

Figure 2: Moving from one color to its complement; requires \texttt{pst-slpe}

\quad This file is part of the \texttt{xcolor} distribution which can be downloaded from the CTAN mirrors (macros/latex/contrib/xcolor/) or the homepage www.ukern.de/tex/xcolor.html. Please send error reports and suggestions for improvements to xcolor@ukern.de.
Figure 3: Explicit color specification via a loop command; requires \verb|multido|

\psset{unit=1.75}\
\begin{pspicture}(0,-1)(2,1)\
\multido{\rHue=0.00+0.01}{100}{\
  \pscircle[linewidth=0.01,\
  linecolor={\hsb}{\rHue,1,1}](1,0){\rHue}}\
\end{pspicture}

Figure 4: Color series — modified version of an example from the \texttt{pst-fill} manual; note that the \verb|\multirput| command does not give the desired result here

\newcommand*{\Sheep}{\begin{pspicture}(3,1.5)\
  \pscustom[\liftpen=2,\fillstyle=solid,\fillcolor=sheep!!+]\
  \pscurve(0.5,-0.2)(0.6,0.5)(0.2,1.3)(0,1.5)(0,1.5)(0.4,1.3)(0.8,1.5)(2.2,1.9)(3.1,1.5)(3.2,1.3)(3.6,0.5)(3.4,-0.3)(3,2.2,0.4)(0.5,-0.2)\
  \pscircle*(2.65,1.25){0.12\psunit} % Eye\
  \psccurve*(3.5,0.3)(3.35,0.45)(3.5,0.6)(3.6,0.4) % Muzzle\
  \pscurve(3,0.35)(3.3,0.1)(3.6,0.05) % Mouth\
  \pscurve(2.3,1.3)(2.1,1.5)(2.15,1.7) % Ear\
\end{pspicture}}\
\definecolorseries{sheep}{rgb}{step}\[rgb]{.95,.85,.55}{.17,.47,.37}\
\resetcolorseries{sheep}\
\psset{unit=0.4}\
\begin{pspicture}(-3,-6)(0,7.5)\
\Multido{\ry=6.0+-1.5}{5}{\
  \rput(0,\ry){\Multido{}{5}{\Sheep}}}\
\resetcolorseries{sheep}\
\multirput(-6,-6)(3,0)5{\Sheep}\
\end{pspicture}
Figure 5: Interaction with native PostScript code — γ-corrected wavelengths

\newcount\WL \unitlength.75pt
\def\WaveToPS#1{% 
  \definecolor{tmp}{rgb:wave}{#1}\extractcolorspecs{tmp}\tmpm\tmpc
  \expandafter\WaveToPSi\tmpc,}
\def\WaveToPSi#1,#2,#3,{\pstVerb{/Red{#1}def /Green{#2}def /Blue{#3}def}}
\def\DisplayBar#1#2{% 
  \linethickness{1.25\unitlength}\WL=360
  \pstVerb{/Gamma{#1}def}\
  \multiput(360,#2)(1,0){456}{\WaveToPS{\the\WL}{\color{lambda}\line(0,1){50}}\global\advance\WL1}\
  \linethickness{0.25\unitlength}\WL=360
  \multiput(360,#2)(20,0){23}{\picture(0,0)\line(0,-1){5}\multiput(5,0)(5,0){3}{\line(0,-1){2.5}}\put(0,-10){\makebox(0,0){\the\WL}}\global\advance\WL20 \endpicture}\
  \put(350,#2){\makebox(0,50){[r]{\small$\gamma$ = #1}}}}
\pstVerb{/Corr{dup 0 gt {Gamma exp}if}def}
\definecolor[ps]{lambda}{rgb}{Red Corr Green Corr Blue Corr}%
\begin{picture}(510,345)(310,-10)
\sffamily\tiny
\DisplayBar{0.4}{0}\
\DisplayBar{0.6}{70}\
\DisplayBar{0.8}{140}\
\DisplayBar{1.0}{210}\
\DisplayBar{1.2}{280}%
\end{picture}