

Org & R via Babel Example

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1 Overview

The following is a quick example of a document created in org-mode which uses org-babel to allow inline R code to produce graphs.

2 Alphabits

I like cereal, especially when it spells.

Graph courtesy of http://addictedtor.free.fr/graphiques/sources/source_78.R

```
# Data from org
doublePlot = function (base, plotFunc,
                        pngopts = c( width = 1024, height = 500 ),
                        pdfopts = c( width = 10, height = 7.5, paper = 'usr' )
                        ) {

  # basename from org-babel
  myPng = paste(base,"png",sep=".")
```

```

myPdf = paste(base,"pdf",sep=".")

png(myPng, pngopts )

plotFunc()

dev.off()

pdf(myPdf, pdfopts)

plotFunc()

dev.off()

}

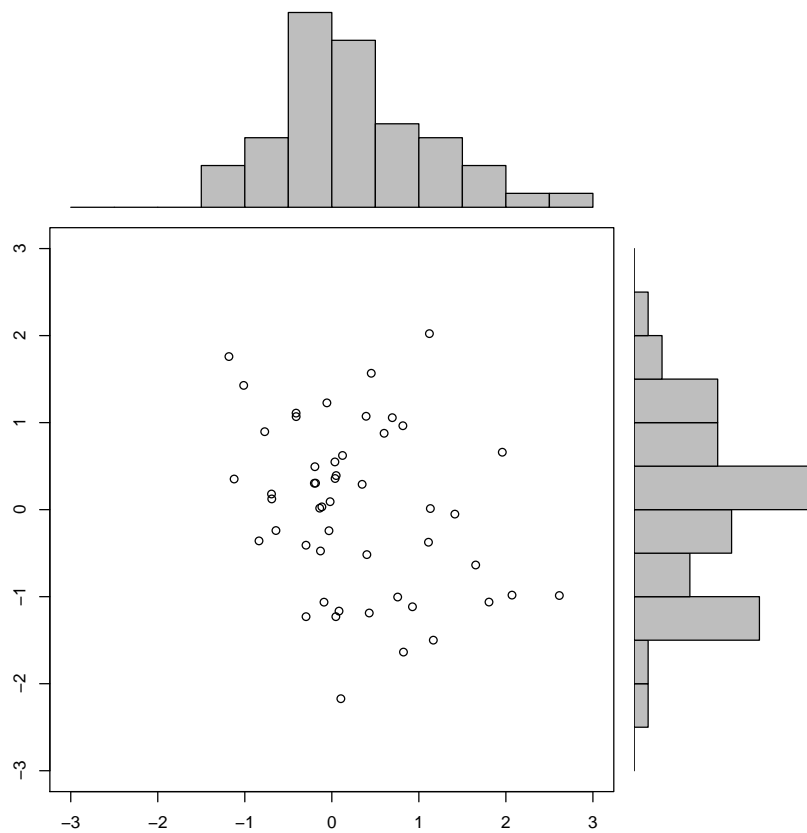
doublePlot(base=basename, plotFunc = function() {
  x <- pmin(3, pmax(-3, rnorm(50)))
  y <- pmin(3, pmax(-3, rnorm(50)))
  xhist <- hist(x, breaks=seq(-3,3,0.5), plot=FALSE)
  yhist <- hist(y, breaks=seq(-3,3,0.5), plot=FALSE)
  top <- max(c(xhist$counts, yhist$counts))
  xrange <- c(-3,3)
  yrange <- c(-3,3)
  nf <- layout(matrix(c(2,0,1,3),2,2,byrow=TRUE), c(3,1), c(1,3), TRUE)
  #layout.show(nf)

  par(mar=c(3,3,1,1))
  plot(x, y, xlim=xrange, ylim=yrange, xlab="", ylab="")
  par(mar=c(0,3,1,1))
  barplot(xhist$counts, axes=FALSE, ylim=c(0, top), space=0)
  par(mar=c(3,0,1,1))
  barplot(yhist$counts, axes=FALSE, xlim=c(0, top), space=0, horiz=TRUE)

})

```

Now we add the code to add the image:



(The png has a lot of whitespace around it.)

3 Thanks!

Org-mode rocks.