

Basic plotting functions like hist, plot, lines, points, boxplot, and barplot are all capable of taking a variety of formatting arguments. Last week we made simple histogram using this code:

```
hist(mydata)
```

We can expand on this by providing what are called graphical parameters. Each parameter is supplied like: tag=value. For instance:

```
hist(mydata, col = "blue", cex = .6, main = "Histogram of Body Size")
```

Here is a list of commonly used graphical parameters:

main	an overall title for the plot
sub	a sub title for the plot
xlab & ylab	a title for the x or y axis
xlim & ylim	Limits of the x or y axis given in the form c(low,high)
cex	A numerical value giving the amount by which plotting text and symbols should be magnified relative to the default. This starts as 1 when a device is opened, and is reset when the layout is changed, e.g. by setting mfrow.
pch	Either an integer specifying a symbol or a single character to be used as the default in plotting points. See points for possible values and their interpretation. Note that only integers and single-character strings can be set as a graphics parameter (and not NA nor NULL).
lty	The line type. Line types can either be specified as an integer (0=blank, 1=solid (default), 2=dashed, 3=dotted, 4=dotdash, 5=longdash, 6=twodash) or as one of the character strings "blank", "solid", "dashed", "dotted", "dotdash", "longdash", or "twodash", where "blank" uses 'invisible lines' (i.e., does not draw them).
lwd	The line width, a positive number, defaulting to 1. The interpretation is device-specific, and some devices do not implement line widths less than one. (See the help on the device for details of the interpretation.)
cex.axis	The magnification to be used for axis annotation relative to the current setting of cex.
cex.lab	The magnification to be used for x and y labels relative to the current setting of cex.
cex.main	The magnification to be used for main titles relative to the current setting of cex.
cex.sub	The magnification to be used for sub-titles relative to the current setting of cex.
col	A specification for the default plotting color. See section 'Color Specification'. (Some functions such as lines and text accept a vector of values which are recycled and may be interpreted slightly differently. Other uses will take just the first value if a vector of length greater than one is supplied.)
col.axis	The color to be used for axis annotation. Defaults to "black".
col.lab	The color to be used for x and y labels. Defaults to "black".
col.main	The color to be used for plot main titles. Defaults to "black".
col.sub	The color to be used for plot sub-titles. Defaults to "black".
font	An integer which specifies which font to use for text. Normally: 1 plain text (the default), 2 bold face, 3 italic and 4 bold italic.
font.axis	The font to be used for axis annotation.
font.lab	The font to be used for x and y labels.
font.main	The font to be used for plot main titles.
font.sub	The font to be used for plot sub-titles.
las	numeric in {0,1,2,3}; the style of axis labels. 0: always parallel to the axis [default], 1: always horizontal, 2: always perpendicular to the axis, 3: always vertical.
pch	0-24 indicate different shapes that can be used in plotting