# Working with R Utility Software

#### Bill Venables

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### Introduction

Vignettes are long form documentation commonly included in packages. Because they are part of the distribution of the package, they need to be as compact as possible. The html\_vignette output type provides a custom style sheet (and tweaks some options) to ensure that the resulting html is as small as possible. The html\_vignette format:

- Never uses retina figures
- Has a smaller default figure size
- Uses a custom CSS stylesheet instead of the default Twitter Bootstrap style

#### Vignette Info

Note the various macros within the vignette section of the metadata block above. These are required in order to instruct R how to build the vignette. Note that you should change the title field and the \VignetteIndexEntry to match the title of your vignette.

#### **Styles**

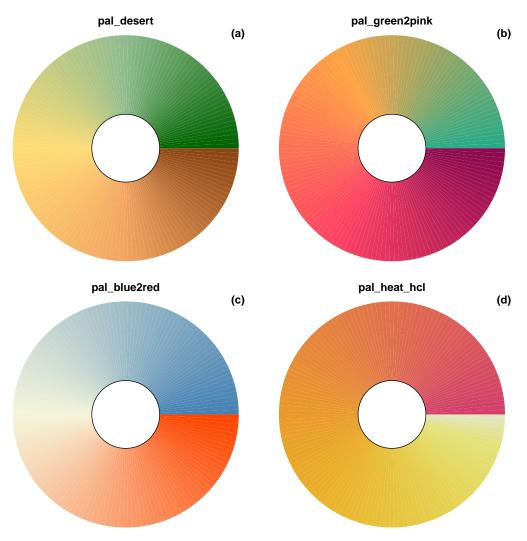
The html\_vignette template includes a basic CSS theme. To override this theme you can specify your own CSS in the document metadata as follows:

```
output:
   rmarkdown::html_vignette:
    css: mystyles.css
```

#### **Figures**

The figure sizes have been customised so that you can easily put two images side-by-side.

```
lazyData::requireData(doParallel)
par(mar=c(1,1,4,1), mfrow = c(2,2))
pals <- pasteO("pal_", cq(desert, green2pink, blue2red, heat_hcl))
foreach(pal = pals, let = letters[1:4]) %do% {
   showColors(get(pal)(150), main = pal)
   text("top right", pasteO("(", let, ")"), cex = 1.25, font = 2)
} %>% invisible()
```



You can enable figure captions by fig\_caption: yes in YAML:

output:

rmarkdown::html\_vignette:

fig\_caption: yes

Then you can use the chunk option fig.cap = "Your figure caption." in knitr.

### **More Examples**

You can write math expressions, e.g.  $Y = X\beta + \epsilon$ , footnotes<sup>1</sup>, and tables, e.g. using knitr::kable().

	mpg	cyl	disp	hp	drat	wt	qsec	vs	am	gear	carb
Mazda RX4	21.0	6	160.0	110	3.90	2.620	16.46	0	1	4	4
Mazda RX4 Wag	21.0	6	160.0	110	3.90	2.875	17.02	0	1	4	4
Datsun 710	22.8	4	108.0	93	3.85	2.320	18.61	1	1	4	1
Hornet 4 Drive	21.4	6	258.0	110	3.08	3.215	19.44	1	0	3	1
Hornet Sportabout	18.7	8	360.0	175	3.15	3.440	17.02	0	0	3	2
Valiant	18.1	6	225.0	105	2.76	3.460	20.22	1	0	3	1
Duster 360	14.3	8	360.0	245	3.21	3.570	15.84	0	0	3	4
Merc 240D	24.4	4	146.7	62	3.69	3.190	20.00	1	0	4	2
Merc 230	22.8	4	140.8	95	3.92	3.150	22.90	1	0	4	2

<sup>&</sup>lt;sup>1</sup>A footnote here.

	mpg	cyl	disp	hp	drat	wt	qsec	vs	am	gear	carb
Merc 280	19.2	6	167.6	123	3.92	3.440	18.30	1	0	4	4

## Also a quote using >:

"He who gives up [code] safety for [code] speed deserves neither." (via)