Corrections and Elucidations (as of May 8, 2010) to the 2nd printing of Data Analysis and Graphics Using R – An Example-Based Approach, 2nd edn
John Maindonald (email: john.maindonald@anu.edu.au) and John Braun


Chapter 2

p.65, footnote 11 (Section 2.2.2)
Omit the final two lines of the footnote, i.e., omit

```r
# Note that parameter settings were given both in the function call and # in the list supplied to key. [With auto.key, this is unnecessary.]
```

p.72, line 14 (ss 2.3.4)
Replace “use as by “use are”.

Chapter 4

p.105, line 16 (ss 4.1.5)
Replace “with 3 d.f.” by “with 8 and 3 d.f.”.

p.108, line -11 (ss 4.2.1)
Replace -6.10 /2.03 by -6.33/2.03

p.110, Table 4.2, column “Test statistic” (ss 4.2.1)
In line 3, omit the vertical bar that appears as the final character in the numerator.

p.111, line -9 (ss 4.2.1)
Replace equal by unequal.

p.115, lines -10 to -9 (Section 4.3)
Replace

```r
> chisq.test(table(nsw74psid3$trt, nsw74psid3$nodeg))
> # Specify correct=FALSE
> ....
X-squared = 12, df = 1, p-value = 0.0004975
```

by

```r
> # Specify correct=FALSE for easy comparison with hand calculation
> with(nsw74psid3, chisq.test(trt, nodeg, correct=FALSE))
> ....
X-squared = 12.9666, df = 1, p-value = 0.0003171
```
Chapter 6

p.192 (Section 6.3.3)

lines 3-4: Replace “The model without the interaction has a slightly smaller AIC. For this reason, and because it is a simpler model, it is the preferred model.” by

“The model without the interaction has a slightly larger AIC. Because however the difference is slight, the simpler model (no interaction) is the preferred model.

p.196, lines -9 to -4 (2nd para under Section 6.5)

This should be abbreviated to:

“The way that data are sampled can likewise affect the coefficients. This section will examine data, sampled in a deliberately biased way, on the effect of book dimensions (thickness, height and width) on book weight. “

p.211, final line of Table 6.3 (ss 6.8.3)

Replace “14 = 28.5 - 16.5” by “12 = 28.5 - 16.5”.

Chapter 7

p.222 (ss 7.1.1), line -6

Replace “4 results/trt” by 3 results/trt.

p.229 (sec 7.3), line -7

Replace `summary(leaf.lm2)` by `summary(leaf.lm3)`.

p.236 (ss 7.5.1)

line 2: “... the first with two knots, and the second with three knots.’

line 10: Replace “Figure 7.7A” by “Figure 7.7B”.

fnote 4, lines 2 & 3 Replace 4 by 3 (3 occurrences). In line 2, replace “# panel B: nspline, df=4” by “# panel B: ns(juice,4)”.

The code then reads:

```
fruit.lmb3 <- lm(ohms ~ ns(juice,3)) # panel B: ns(juice,4)
plot(fruit.lmb3)
```

p.237 (ss 7.5.1)

Figure 7.7, caption: Add: The degrees of freedom (‘df’ or ‘degree’) shown are those supplied to `ns()` or `poly()`. These must in each case be increased by one to allow for the intercept.

Figure 7.8, caption: Replace “Figure 7.7A” by “Figure 7.7B”.

p.238, Figure 7.9, caption (ss 7.5.1)

Replace “B-spline (one knot) fitted in Figure 7.7A” by “N-spline (three knots) fitted in Figure 7.7B”
Chapter 10

Chapter 10 – output from mcmcsamp(): Changes to the structure of objects created by mcmcsamp() affect code on pages 310 (lower half-page), 314 (lines -16 to -10) and 343 (line 2). The code on page 310 starts with the two lines:

ant111b.lmer <- lmer(harvwt 1 + (1 | site), data=ant111b)
ant111b.samp <- mcmcsamp(ant111b.lmer, n=1000)

The code in subsequent lines is no longer valid. Instead, specify:

HPDinterval(VarCorr(ant111b.samp, type="varcov"))

This does not, currently, give results that are believable for this example.

p.314 (ss 10.2.1), lines -17 to -10

science1.lmer <- lmer(like ~ sex + PrivPub + (1 | school:class),
data = science, na.action=na.exclude)
science1.samp <- mcmcsamp(science1.lmer, n=1000)
HPDinterval(VarCorr(ant111b.samp, type="varcov"))

Here, the results do make sense.

p.343 (Section 10.5.2), lines 1–3

Code to handle the use of mcmcsamp(), for models of this type, has not at the time of writing been adapted for use with the current version of lmer()

p.348 (Section 10.10), exercise 1

Replace the final four lines of code, starting vcov <- show(VarCorr(kiwishade.lmer)), with

vcov <- VarCorr(kiwishade.lmer)
vars <- c("(block:plot)^2"=as.vector(vcov["block:plot"]),
"sigma^2"=as.vector(attributes(vcov, "sigmaREML")$sc^2))
print(vars)

p.348 (Section 10.10), exercise 5

For assessing the accuracy of the components of variance, consider using mcmcsamp() as demonstrated on p.314.

Chapter 11

p.365, line 9 (ss 11.5.1)

Replace “(=0.832+0.054)” by “(=0.832+0.045)”

p.371, line -12 (Section 11.7)

Replace regression by classification.

Chapter 12

Figure 12.1 (p.377) & Figure 12.3 (p.380), figure legends

In these figures, females are in gray, and males in black.
Chapter 14

p.421, line -9 (l. -2 of Subsection 14.1.1)
Replace *library()* by *attach()*.

p.462, Figure 14.2 (ss 14.11.3)
In the legend in the top left of the plotting area, replace \[ y = -1.112 x^2.274 \] by \[ y = 0.384 x^{2.274} \].

p.463, line -8 (Section 14.12)
Replace *trellis.settings* by *par.settings*.

p.464, line 9 (ss 14.3.4)
Replace *levels (groups) provides the legends* by
the levels of the *groups* argument supply the text strings.

Index of R symbols and functions, pp.485-490
On page 487, remove “189” from the entries against “identify”.
On page 488, add the index entry
*par.settings, 57, 58, 463*
On page 489, under trellis.par.set, replace 462, 464 by 463.

Redundant spaces
Omit redundant spaces as follows:
p.464 : *help(xyplot) (line 19), simpleKey() (lines 11-12 and 17)*
[NB also: “help” should be in typewriter font.]