

1. p. 19, The second line of code should read (missing backslashes):

```
> mm <- matrix(unlist(strsplit(as.character(nd$id),
+ "\\.")), ncol = 2, byrow = TRUE)
```

2. p. 20, line 5 of prob. 1.9 should read "2 cycles/second".

3. p. 28, line 5, should read "The function `lm` is the principal tool ..."

4. p. 41, apparently `mcmcscamp` in **lme4** was broken when we last ran this function, as the confidence intervals on the random effects do not even include the estimates. An alternative, in this case, would be to use the `lme` function in the **nlme** package. The code to perform this analysis with `lme` and the results are shown below

```
> library(nlme)
> data(ModelFest.df, package = "MPDiR")
> mfGab <- droplevels(subset(ModelFest.df, Stim %in% paste0("Stim", 1:10)))

> mfGab.lme <- lme(LContSens ~ Stim, data = mfGab, random = ~ 1 | Obs/Stim)
> mfGab.lme
```

Linear mixed-effects model fit by REML

```
Data: mfGab
Log-restricted-likelihood: 354
Fixed: LContSens ~ Stim
(Intercept)  StimStim2  StimStim3  StimStim4  StimStim5  StimStim6  StimStim7  StimStim8
      1.8210      0.1394      0.2422      0.2855      0.1710      0.0227      -0.2001      -0.5232
StimStim9  StimStim10
     -0.8615     -1.2535
```

Random effects:

```
Formula: ~1 | Obs
      (Intercept)
StdDev:      0.151
```

```
Formula: ~1 | Stim %in% Obs
      (Intercept) Residual
StdDev:      0.112      0.105
```

Number of Observations: 640

Number of Groups:

```
      Obs Stim %in% Obs
      16      160
```

```
> intervals(mfGab.lme)
```

Approximate 95% confidence intervals

Fixed effects:

```
      lower  est.  upper
(Intercept) 1.7251 1.8210 1.917
StimStim2    0.0530 0.1394 0.226
StimStim3    0.1558 0.2422 0.329
StimStim4    0.1992 0.2855 0.372
StimStim5    0.0846 0.1710 0.257
StimStim6   -0.0637 0.0227 0.109
StimStim7   -0.2864 -0.2001 -0.114
StimStim8   -0.6096 -0.5232 -0.437
StimStim9   -0.9479 -0.8615 -0.775
StimStim10  -1.3399 -1.2535 -1.167
```

```

attr("label")
[1] "Fixed effects:"

Random Effects:
Level: Obs
              lower est. upper
sd((Intercept)) 0.103 0.151 0.221
Level: Stim
              lower est. upper
sd((Intercept)) 0.0965 0.112 0.129

Within-group standard error:
lower est. upper
0.0989 0.1054 0.1122

```

5. p. 54, point 3 before Sect. 2.6.1, “expected value of the response,  $\mu$ ,”
6. p. 59, first line after Eq. 2.17 Michaelis-Mention should be Michaelis-Menten.
7. p. 105, line 8, should read “...and a logical, Stim, indicating...”
8. p. 108, lines 8–9, it should read, “We will abandon the latter in favor of the former, ...”
9. p. 109, line 2, after code at top of page, level should read Intensity.
10. p. 130, The 3 lines of code just after the first paragraph

```

> GrpResp <- Grp.glm <- vector("list", 2)
> names(GrpResp) <- names(Grp.glm) <- names(levs)
> for (nlevs in names(levs)) {

```

should be deleted.
11. p. 134, The plot command for Fig. 4.10 is missing. It should be

```

plot(indiv.diags[[1]], cex = 0.5)

```
12. p. 137, In the code at the bottom of the page, the llines command in the panel function was truncated. It should have read,

```

+       llines(nd$Phaseshift[nd$ID == which],
+             $pred[nd$ID == which], lwd = 2, ...)

```
13. p. 163, the code to draw Fig. 5.9 is at the bottom of p. 164.
14. p. 165 caption for Fig. 5.10, “dotted” for “solid grey” and just “solid” for “solid black”.
15. p. 173, Fig. 6.4b-d, It should have been indicated that these three figures come from Ahumada, Jr., A. J. (1996). Perceptual classification images from vernier acuity masked by noise, *Perception* **25**(ECVP Suppl.), 18 (abstract) at <http://vision.arc.nasa.gov/publications/ecvp96a/abs.html>.
16. p. 202, line 1, it should read,  $d' = 2\sigma^{-1}$ .
17. p. 203, Eq. (7.9) missing closing bracket

```

 $\Phi^{-1}(E[P(R = 1)]) = \mathbf{X}\beta$ 

```
18. p. 277, line 8 from bottom, the code should read (missing backslashes),

```

+   trace.label = "\n Flanker \n Contrast ",

```
19. p. 278, 3rd line from bottom, the code should read (missing backslashes),

```

+   title = "Flanker\nContrast", cex = 0.75),

```
20. p. 285, line 3, the code should read (missing backslash),

```

+   title = "Flanker of \n Contrast ")

```
21. p. 306, line 13, it should read “...defined on p. 304...”
22. p. 310-311, for the code at the bottom of the first page and the beginning of the next, some of the results should be distributed along 2 lines. It should read as,

```

> a.lst <- list(A = LETTERS[1:5], B = (1:5)^2,
+   state = c(TRUE, FALSE, TRUE),
+   f = factor(c("Male", "Female", "Male", "Female", "Female")))
> a.lst
$A
[1] "A" "B" "C" "D" "E"

$B
[1] 1 4 9 16 25

$state
[1] TRUE FALSE TRUE

$f
[1] Male Female Male Female Female
Levels: Female Male

```

23. p. 311, lines 13–14 should be distributed across three lines as in

```

> a.lst[2]
$B
[1] 1 4 9 16 25

```

24. p. 312, lines 12–13 from the bottom, the code should be distributed across three lines as in

```

> d.df[5, 3]
[1] Normal
Levels: Normal Protan Deutan Tritan

```

25. P. 328, line 1 space between “last function”

26. p. 348, line 9 after Eq. B.43, period after  $\lambda = 1$ .



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