ERRATA in the first edition (Chapters 1-7)

Page 4, Chapter 1, box

…for all N sources in the acoustic scene.

Page 21, Chapter 1: Acknowledgment

The Acknowledgment should read:

To my mentor, Jan van Gisbergen, who taught me everything about neuroscience, and whose influence on my thinking is so clearly visible in this book. I thank my colleagues, technicians, PhD students, post-docs, and graduate students, who greatly enriched my lab for more than 25 years. In particular, I am indebted to Maarten Frens, Jeroen Goossens, Marcel Zwiers, Paul Hofman, Denise van Barneveld, Tom van Grootel, Joyce Vliegen, Peter Bremen, Rob van der Willigen, *Huib Versnel,* Marc van Wanrooij, and Martijn Agterberg, who designed and completed the many tedious experiments and sophisticated data analyses that are presented in Chapters 7–14 of this monograph.

Page 25, after Eq. 2.9:
"spring's 1D length density in kilogram per cubic meter, while …"
should read:
…"spring's 1D length density *in kilogram per meter*, while the gas"…

Page 28, halfway:

"will the adiabatic approximation."

should read

"… will the adiabatic approximation *fail*."

Page 51, Eqn. 3.2

The right-hand part of the equation should read: $\varphi_0 = \cos^{-1}\left(\frac{y_0}{A}\right)$

Page 53, Eqn. 3.7

The right-hand part of the equation should read: $\varphi_0 = \cos^{-1}(\zeta)$

Page 73, Fig. 3.12

The oscillations in the lower half of the figure should have their phases inverted.

Page 75, 2nd part Eqn. 3.63

The angle of the pole should read as:

$$\theta_{\text{pole}}(\omega_0) = \arctan\left(\frac{\omega_0}{(1/T_{RC})}\right) \equiv -\Phi(\omega_0)$$

Page 91, above Eqn. 4.5

The first line should read:
"The *Italian* mathematician Vito Volterra *(Fig. 4.3)* demonstrated that …"

The third line should read:
"….. can be given by" (remove Fig. 4.3 and Q1)

Page 111, Exercise 4.5

The question should read:
"Verify that the third-order Wiener *functional* is indeed orthogonal to the first-order Wiener *functional* (see Eqn. 4.18 for their formulations)."

Page 111, Exercise 4.8

The exercise should refer to Fig. 4.11 (sandwich of linear – second-order – linear systems).

Page 111, Exercise 4.9

The exercise should refer to Fig. 4.13

Page 120, Eqn. 5.10:

The right-hand part of this equation should read:

$$\text{2D: } \left(\frac{\partial \psi_y}{\partial x} - \frac{\partial \psi_x}{\partial y}\right) \cdot \hat{z} = 0$$

Page 163, Eqn. 6.19

The equation should read:

$$s(t) = [1 + a_{\text{mod}} \sin(\omega_{\text{mod}} t)] \sin(\omega_{\text{carr}} t)$$

Page 163, Eqn. 6.20

The equation should read:

$$s(t) = \sin(\omega_{\text{carr}} t) + \frac{1}{2}[\cos(\omega_{\text{carr}} - \omega_{\text{mod}})t - \cos(\omega_{\text{carr}} + \omega_{\text{mod}})t\ ]$$

Page 168, Problem 6.2

The problem should refer to *Eqn. 6.22*

Page 177, Figure 7.4

The text line at the bottom: "Mammalian ILD pathway", should read:
"Mammalian ITD pathway"

Page 192, Equation 7.33

Note that the equation can be further simplified to

$$G(\omega) = 2 \cdot \left|\cos\left(\frac{\omega \Delta T}{2}\right)\right|$$

Page 198, Figure 7.19

The reference in the legend should be made to Eqn. 7.41 instead of Eqn. 7.34.

Page 203, Equation 7.49

The equation for the reflected sound should read:

$$p_{\text{Reflect},1}(t) = \frac{1}{r_{11} r_{12}} \int_0^{\infty} w_1(\tau)\, p_0\left(t - \frac{r_{11}}{c} - \frac{r_{12}}{c}\right) d\tau$$

Page 204, Figure 7.21

The reference in the legend should be made to Eqn. 7.49 instead of Eqn. 7.45.

Page 206, Problem 7.7

The problem should refer to *Eqn. 7.31*

Page 206, Problem 7.8

The problem should refer to *Eqn. 7.41* resp. *Eqn. 7.37* instead of 7.36 and 7.34.

Page 206, Problem 7.10

The problem should refer to *Eqn. 7.49* instead of 7.45.