Correction to: The Science of Musical Sound

Correction to:

W. R. Bennett, Jr., *The Science of Musical Sound*,

<https://doi.org/10.1007/978-3-319-92796-1>

The inadvertently published equations have been corrected as mentioned below.

Chapter 1

Page 16

The beta symbol in the below equation in this page has been removed and corrected to appear as below:

$$\approx 1449 + 4.6T + (1.34 - 0.01T)/(S - 35) + 0.0216z \text{ m/s}$$

Equation 1.26: (Page 25)

The letter “M” next to the lambda symbol has been made as a subscript, the letter “S” next to “V” has been made as a subscript in two instances and one set of parentheses has been removed in $(c - V_S)$

$$\lambda_M = (c - V_S)T/(f_S T) = (c - V_S)/f_S.$$

The updated version of the chapters could be found at

https://doi.org/10.1007/978-3-319-92796-1_1

https://doi.org/10.1007/978-3-319-92796-1_2

https://doi.org/10.1007/978-3-319-92796-1_4

https://doi.org/10.1007/978-3-319-92796-1_7

<https://doi.org/10.1007/978-3-319-92796-1>

Chapter 2

Equation 2.8: (Page 40)

A space has been added between “ $\sin nx$ ” and “[n odd]”

$$y = \sin x + \frac{1}{3} \sin 3x + \frac{1}{5} \sin 5x + \cdots + \frac{1}{n} \sin nx \text{ [} n \text{ odd]}.$$

Equation 2.9: (Page 41)

The n exponent of -1 has been made as a whole to the power of $(-1)^n$

$$y = \sin x - \frac{1}{2} \sin 2x + \frac{1}{3} \sin 3x - \frac{1}{4} \sin 4x + \cdots + \frac{(-1)^n}{n} \sin nx$$

Chapter 4: (Page 108)

In Eq. 4.2, the second sin has been non italicised.

Chapter 7: (Page 319)

In Eq. 7.1, first z in denominator has been made as a subscript.

Appendix A

The equal to symbol between M and $\frac{d^2x}{dt^2}$ has been deleted in Eq. A.1.

The numeral 0 has been added as a subscript to omega squared in the line before equation A.2, as given here: $\omega_0^2 = K/M$ and in Eq A.2: The ω_0 has been squared to appear as given here: ω_0^2

Eq A.3: The indent before the word “where” has been removed. (Page 330)

In the line before eq A.4, the numeral 0 has been added to omega as a subscript and in the line before eq A.6, the numeral 0 has been added to x as a subscript in two instances, as shown below:

$$x = x_0 \sin \omega t, \text{ then } v = dx/dt = \omega x_0 \cos \omega t$$

Eq A.6: In the second line, a plus sign has been added between $\sin^2 \omega_0 t$ and $\cos^2 \omega_0 t$:

$$\frac{1}{2} K x_0^2 (\sin^2 \omega_0 t + \cos^2 \omega_0 t)$$

In the line after eq A.6, the contents in parentheses has been changed as shown below:

$$\omega_0 = K/M \text{ and } (\sin^2 \omega_0 t + \cos^2 \omega_0 t) = 1$$

Eq A.7: The subscript “1” in “ $K_1 x$ ” has been removed and made to appear as “ Kx ”. (Page 330)

In the last line in code in page 346, the first instance of **NEXT T** has been deleted and made to appear as below

REM Plot or Print results here NEXT T

The figure referred to has been modified as Fig. A.3 in the last line of page 335 and in page 347, the first equation in the caption for Fig. A.8 has been modified as " $\gamma = 0.5\omega_0$ "

Appendix B

In Eq. B.9, the last equal to sign following " $-k^2$ ", has been deleted. (Page 359) and in Eq. B.11, "cos" has been non italicised. (Page 359)

In page 366 and in Eq. B.27, the numeral "2" in " T_2 " has been made as a subscript the indent near the word "where" in page 367 & below Eq. B.38 (Page 369), has been removed.

In Eq. B.31, the irrelevant characters " $nx2dx dIt2dxor$ " has been deleted. (Page 367)