

Introduction to Biomedical Engineering

John D. Enderle, Susan M. Blanchard, Joseph D. Bronzino

Errata for 2nd Printing

Chapter 3

p. 107, Equation at the bottom of the page should be (correction in red)

$$I = \frac{E_K - E_{Na}}{R_{Na} + R_K} = \frac{(-105 - 56) \times 10^{-3}}{(15.67 + 1.7) \times 10^3} = -9.27 \mu A$$

p. 108, line after Example Problem 3.5 should read

Find V_m for the frog skeletal muscle if $R_{Cl} = 3.125 \text{ k}\Omega$.

p. 125, “The units for the α is and β is in Equations 11.43, 11.45 and 11.46 are ms^{-1} while n, m and h are dimensionless and range in value from 0 to 1.”

Chapter 7

p. 300, last line (change 11.8 to 11)

the eyeball radius of 11 mm.

p. 311, Equation 7.21 should be

$$T = F - B\dot{x}_2$$

p. 315, Equation 7.28

$$F = 0.4 + 0.012\cancel{5}\theta N \quad \text{for } \theta \leq 0^\circ \text{ (T direction)}$$

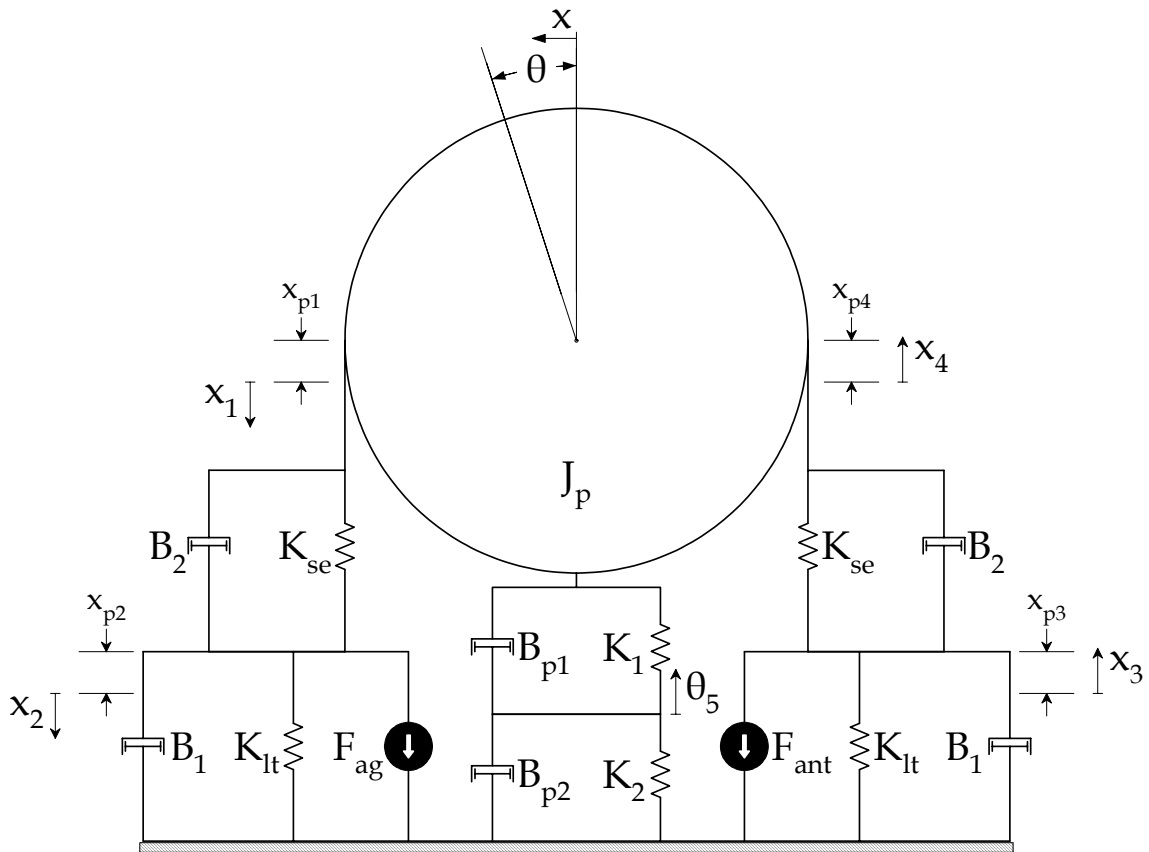
Aside: This equation corrects the negative sign associated with θ , and making the slope at 0.012 rather than 0.125, giving a slightly better fit to the data. The point at -45° is still not fit altogether well. this isn't really a problem since a saccade of -45° does not occur naturally. The revised equation should be

$$F = 0.4 + 0.012\theta N \quad \text{for } \theta \leq 0^\circ \text{ (T direction)}$$

p. 315, fourth line

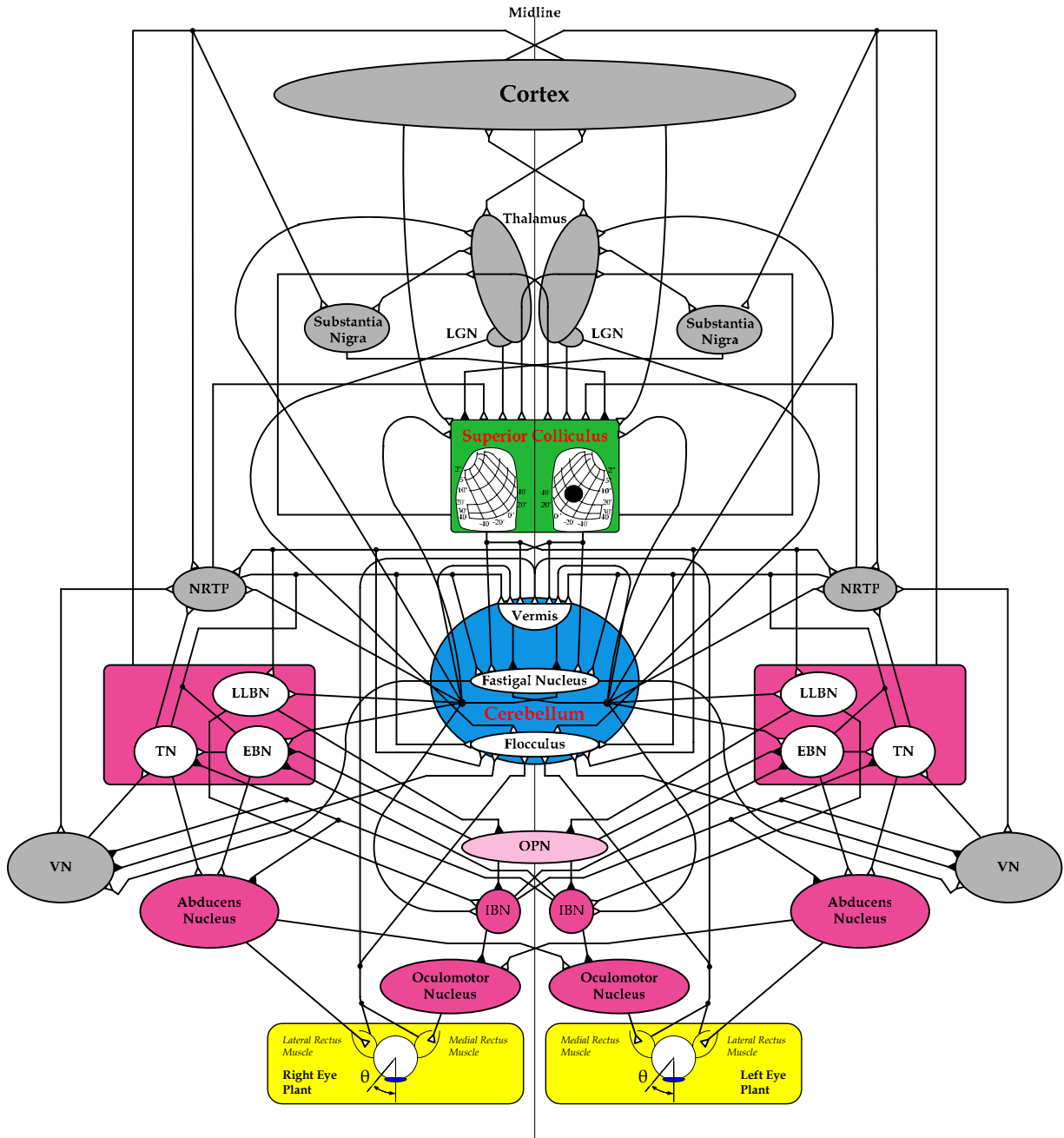
$$\theta = 5208.7 \times (x_1 - 3.705) \text{ (remove the mm from the equation)}$$

p. 325, Figure 7.27 q5 should be θ_5 .



p. 326, Expression for $\delta = \frac{57.296}{rC_4}$

p. 334, Figure 7.28 has two arrows in the wrong direction



Chapter 8

p. 394, below equation 8.58, the term in the square root a should be squared, not subscripted

$$\alpha = 0.5 \left[a + \sqrt{a^2 - b} \right]$$

p. 395, 10th line of center text block, the word estimated was misspelled as “estiamted”

p. 396, 10th line of section 8.4, the word estimation is misspelled as “estiamtion”

p. 403, Top of the page, incorrect numbering of subchapter