# Errata in "Applied Iterative Methods"

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Apparently, it is impossible to have a book free from typos and other errata. Here is the list of the ones found so far. If you find more, please email me at Charles_Byrne@uml.edu . I will post the list of errata on my web site, http://faculty.uml.edu.cbyrne/cbyrne.html .

**Typographical Errors and Errata**

- On page 90, line 14, the equation

$$x^k = (k-1)x^0$$

should read

$$x^k = (k+1)x^0.$$

- In Section 8.4, beginning on page 101, replace all the $\gamma$ with $\epsilon$.

- On page 137, remove $s_j$ in Theorem 12.3.

- On page 165, two lines above Equation (14.3), change $\gamma$ to $\gamma^2$.

- On page 171, the second displayed line,

$$f_l((S_{lj}/\lambda_{lj})z_j - (S_{lj}/\lambda_{lj})x_j + (S\mathbf{x})_l),$$

should read

$$f_l\Big((S_{lj}/\lambda_{lj})z_j - (S_{lj}/\lambda_{lj})x_j\Big) + f_l((S\mathbf{x})_l).$$

Therefore, the third displayed line should read

$$\sum_{l=1}^{p}\sum_{j=1}^{J}\lambda_{lj}f_l\Big((S_{lj}/\lambda_{lj})z_j - (S_{lj}/\lambda_{lj})x_j\Big) + \sum_{l=1}^{p} f_l((S\mathbf{x})_l).$$

- On page 169, Equation (14.11) should read

$$\log x_j^{k+1} = \Big(\frac{\delta_j}{\delta_j + s_j}\Big)\log\gamma_j + \Big(\frac{s_j}{\delta_j + s_j}\Big)\Big[\log x_j^k + s_j^{-1}\sum_{i=1}^{I} A_{ij}\log\big[b_i/(Ax^k)_i\big]\Big].$$