Errata for *Statistical Analysis of Network Data: Methods and Models*
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1. Pg. 89, following eqn (4.7), the definition of $\sigma(s,t)$ is simply the total number of shortest paths between s and t.

2. Pg. 90, line 15, "... the largest eigenvalue of $\mathbf{A}$ will be simple ...."

3. Pg. 96, Eqn (4.11), the denomenator should be $|V'|$, rather than V'.

4. Pg. 99, Menger's Theoreom, "... if and only if all pairs of distinct nonadjacent (distinct) vertices ...."

5. Pg. 101, Fig 4.5, the tendrils associated with the Out-Component should be directed *towards* that component, not away.

6. Pg. 121, Problem 4.4(a). "Show that in this case the first two smallest eigenvalues will be zero,...."

7. Pg. 146 (and also Exercise 5.7), eqns (5.40) - (5.42) should read

$$\begin{aligned}
\mathbb{E}(N) &= \mathbb{E}\left(\sum_i Z_i\right) = N_v p_0 \\
\mathbb{E}(M_1) &= \mathbb{E}\left(\sum_{i\neq j} Z_i Z_j A_{ij}\right) = N_e p_0^2 \\
\mathbb{E}(M_2) &= \mathbb{E}\left(\sum_{i\neq j} Z_i (1-Z_j) A_{ij}\right) = N_e p_0 (1-p_0) \ ,
\end{aligned}$$

8. Pg. 157, bottom. The graphs $\mathscr{G}_{N_v,p}$ have small diameter. However, typically, in order to be said to possess the small-world property, a graph must also have non-trivial cluster. Since $\mathscr{G}_{N_v,p}$ have small clustering coefficient, they cannot be said to possess the small-world property in this sense.

9. Pg. 175, discussion of BA/preferential attachment models. Again, the small-world property requires both small diameter and non-trivial clustering. While these models possess the former, they do not possess the latter.

10. Pg. 251, formula (8.12), replace β_1 with β, yielding

$$\log \frac{\mathbb{P}\left(X_i = 1 \,|\, \mathbf{X}_{\mathscr{N}_i} = \mathbf{x}_{\mathscr{N}_i}\right)}{\mathbb{P}\left(X_i = 0 \,|\, \mathbf{X}_{\mathscr{N}_i} = \mathbf{x}_{\mathscr{N}_i}\right)} = \alpha + \beta \sum_{j\in\mathscr{N}_i} x_j \ .$$

11. Pg. 253, bottom, "... and $M_{11}(\mathbf{x})$ is twice the number of adjacent pairs of vertices where both have the attribute value 1."

12. Pg. 254, eqn (8.9), should be

$$\left(\hat{\alpha},\hat{\beta}\right)_{MPLE} = \arg\max_{\alpha,\beta} \left\{ \alpha M_1(\mathbf{x}) + \beta M_{11}(\mathbf{x}) - \sum_{i=1}^{N_v} \log\left[1 + \exp\left(\alpha + \beta \sum_{j\in\mathscr{N}_i} x_j\right)\right]\right\} \ .$$