Erratum: Self-Similarity of Complex Networks and Hidden Metric Spaces [Phys. Rev. Lett. 100, 078701 (2008)]

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In our recent publication [1], we renormalized the graphs generated by our model considering the subgraphs of vertices with hidden variables $\kappa > \kappa_T$, where κ was power law distributed in the domain $[\kappa_0, \infty)$. In the first version of the model that was submitted to Physical Review Letters, the parameter κ_0 was set to $\kappa_0 = 1$. Setting this parameter to a particular value has no effect on the generated graphs except for their average degree. After the first round of reviews, we decided to set the parameter $\kappa_0 = (\gamma - 2)\langle k \rangle/(\gamma - 1)$ so that the average degree of vertices with hidden variable κ was simplified to $\bar{k}(\kappa) = \kappa$. In this way, κ can be identified with the degree of the vertex. All computations were updated accordingly in the final version of the paper except eqs. (5) and (6) that in the published version do not contain any κ_0 dependence since they still refer to the first manuscript with $\kappa_0 = 1$. We provide the correct equations below, taking into account that the average of κ within $G(\kappa_T)$ should read $\langle \kappa(\kappa_T) \rangle = \langle k \rangle \kappa_T/\kappa_0$ and that the number of nodes in $G(\kappa_T)$ should be $N(\kappa_T/\kappa_0)^{1-\gamma}$ [in the paragraph of the paper above Eq. (5)].

(i) Equation (5) should read

$$\kappa_0 \to \kappa_T; \qquad \delta \to \delta \left[\frac{\kappa_T}{\kappa_0} \right]^{1-\gamma}.$$

(ii) Equation (6) should read

$$\bar{k}_i(\kappa|\kappa_T) = \left[\frac{\kappa_T}{\kappa_0}\right]^{2-\gamma} \kappa \text{ and } \langle k_i(\kappa_T) \rangle = \left[\frac{\kappa_T}{\kappa_0}\right]^{3-\gamma} \langle k \rangle.$$

Notice that now the choice $\kappa_T = \kappa_0$ recovers the complete graph, as expected.

We would like to stress that despite this slip, all results in the paper are correct, in particular, the self-similarity of the subgraphs given by Eq. (7), as it can be clearly observed in Fig. 3, and the fact that the average clustering coefficient of the subgraphs are independent of κ_T .

[1] M. A. Serrano, D. Krioukov, and M. Boguñá, Phys. Rev. Lett. 100, 078701 (2008).