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ERRATUM

Erratum to: Efficient simulation of diffusion-based choice RT models on CPU and GPU

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Due to an only partially implemented change in notation at the end of the writing process, some of the equations in the article are not consistent. The problem is limited to a faulty communication of the formulas in question and has no bearing on the software or the results presented.

A first inconsistency can be found in the second sentence after Equation 2. The p-th component of the drift rate should of course be: $A_p(t, \mathbf{y}) = \nu_p(t) + \sum_q \Gamma_{pq} y_q + g_p(\log(y_p) - \log(1 - y_p))$. In the next paragraph, the direction of the two inequalities should be reversed and thus replaced by respectively $g_p < 0$ and $g_p \geq 0$.

The online version of the original article can be found at http://dx.doi.org/10.3758/s13428-015-0569-0.

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In the section about the IDM, Equation 5 should become:

$$F(\mathbf{y}) = -(\mathbf{B} - \Theta)^T \cdot \mathbf{y} + \mathbf{y}^T \cdot \mathbf{W} \cdot \mathbf{y} + \beta^{-1} \sum_p N_p (y_p \log(y_p) + (1 - y_p) \log(1 - y_p)) \quad (5)$$

and the inline formulas in the later subsection, titled "Continuous dynamics" should be adjusted as follows: (first sentence) "For the continuous dynamics, the IDM is a special case of the general diffusion equation, shown in Equation 1, with $A_p(\mathbf{y}) = -\beta D_p \frac{\partial}{\partial y_p} F(\mathbf{y})$ ..." and (third sentence) "This can be seen from the fact that the nonlinear part in $A_p(\mathbf{y})$, or $-\beta D_p N_p \frac{\partial}{\partial y_p}(y_p \log(y_p) + (1 - y_p) \log(1 - y_p)) = -\beta D_p N_p (\log(y_p) - \log(1 - y_p))$ ...".

Finally, Equation 6 should become:

$$\mathbf{y}_{(n+1)\tau} = \mathbf{y}_{n\tau} + A(n\tau, \mathbf{y}_{n\tau})\tau + \mathbf{C} \cdot \triangle \mathbf{W}_{(n+1)\tau}. \quad (6)$$