Erratum for 'Modelling High-Dimensional Categorical Data Using Nonconvex Fusion Penalties'

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The expression for $u_{k,r,1}(x)$ in Appendix A of Stokell et al. (2021, pg. 608) is incorrect. It should read

$$u_{k,r,1}(x) := \frac{2a_r x^2 + 2(b_r - 2a_r\gamma\lambda)x + \gamma(b_r - \lambda)^2}{2(1 - 2a_r\gamma)} + c_r,$$

$$\text{with} \quad \operatorname{dom} u_{k,r,1} = \begin{cases} ((1 - 2a_r\gamma)I_{k,r} + \gamma(\lambda - b_r)) \cap \left[\frac{\lambda - b_r}{2a_r}, \gamma\lambda - \frac{b_r}{2a_r}\right) & \text{if} \quad 2a_r - 1/\gamma > 0 \\ \emptyset & \text{otherwise.} \end{cases}$$

References

B. G. Stokell, R. D. Shah and R. J. Tibshirani. Modelling high-dimensional categorical data using nonconvex fusion penalties. *Journal of the Royal Statistical Society: Series B*, 83(3): 579–611, 2021.

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