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Published in:
Proceedings of the Royal Society B: Biological Sciences

DOI:
10.1098/rspb.2019.2358

Publication date:
2019

PROCEEDINGS B

royalsocietypublishing.org/journal/rspb

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Cite this article: Kröger B, Franeck F, Rasmussen CMØ. 2019 Correction to 'The evolutionary dynamics of the Early Palaeozoic marine biodiversity accumulation'. *Proc. R. Soc. B* **286**: 20192358.
http://dx.doi.org/10.1098/rspb.2019.2358

Correction to 'The evolutionary dynamics of the Early Palaeozoic marine biodiversity accumulation'

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Proc. R. Soc. B **286**, 20191634 (Published Online 28 August 2019) (doi:10.1098/rspb.2019.1634)

The original article [1] contains three minor errors.

1) The numerical values denominating the survivorships and their explanation in the Methods section of the original article are erroneous. We did not calculate 50, 70, and 90% survivorships. Correctly, we determined the antecedent and posterior time bins containing 55, 65, and 75% t_i richness levels and calculated l_{bw} and l_{fw} as time ranging from t_i towards these time bins. This resulted in 55, 65, and 75% survivorships, respectively. We changed figure 1 of the original article accordingly (see corrected figure 1). In the text of the original article, the 90% survivorship level correctly refers to the 55% survivorship level, throughout.

2) The extinction rates in the original article are calculated based on erroneous time bin length attributions. Correctly, the rates need to be calculated based on million years and ranging from time bin midpoint to time bin midpoint. We changed our script lines 145–161 accordingly (see https://doi.org/10.5281/zenodo.3476274). The corrected results are slightly different and correctly scale from 0 to >1 (see corrected figure 1; corrected electronic supplementary material, figures S1 and S2). The results of the change point analysis do not change (see corrected electronic supplementary material, figure S2).

3) The Late Silurian peak in extinction rates reflects the Lau event and not the Mulde event. Accordingly, reference [43] in the original article needs to be replaced with [2].

Corrected figure 1. Early Palaeozoic curves of (*a*) per time bin genus level richness (adapted from [3]), (*b*) genus level relative diversification rate, (*c*) genus level extinction and origination rates (r.), and (*d*) duration of the forward (l_{fw}) and backward (l_{bw}) survivorship of 55, 65, and 75% of the cohort of genera of each time bin. (*a*), (*c*), and (*d*) are estimated with CR-modelling. Vertical bars indicate 95% confidence intervals. Note major changes in (*a*), (*c*), and (*d*) during the Furongian–Tremadocian interval. I–IX, designate numbered geo-historical intervals of distinct survivorship trends. Ae, Aeronian; CE, Cambrian Explosion; D., Devonian; Dp, Dapingian; Dw, Darriwilian; Fl, Floian; Fu, Furongian; Go, Gorstian; GOBE; Great Ordovician Biodiversification Event; Hi, Hirnantian; Ho, Homerian; Ka, Katian; Lo, Lochkovian; LOME; Late Ordovician Mass Extinctions; Lu, Ludfordian; Mia, Miaolingian; Pr, Pridolian; Rh, Rhuddanian; Sb, Sandbian; Se2, Cambrian Series 2; Sh, Sheinwoodian; Te, Terreneuvian; Tl, Telychian; Tr, Tremadocian. (Online version in colour.)

Corrected electronic supplementary material, figure S1. Time series of origination rate calculated with the CR-modelling approach. Time series starts at fifth time bin (Terreneuvian 5, see [3] for details of time bins). Horizontal bars indicate mean values before and after changepoint detected in a likelihood-based framework approach [4].

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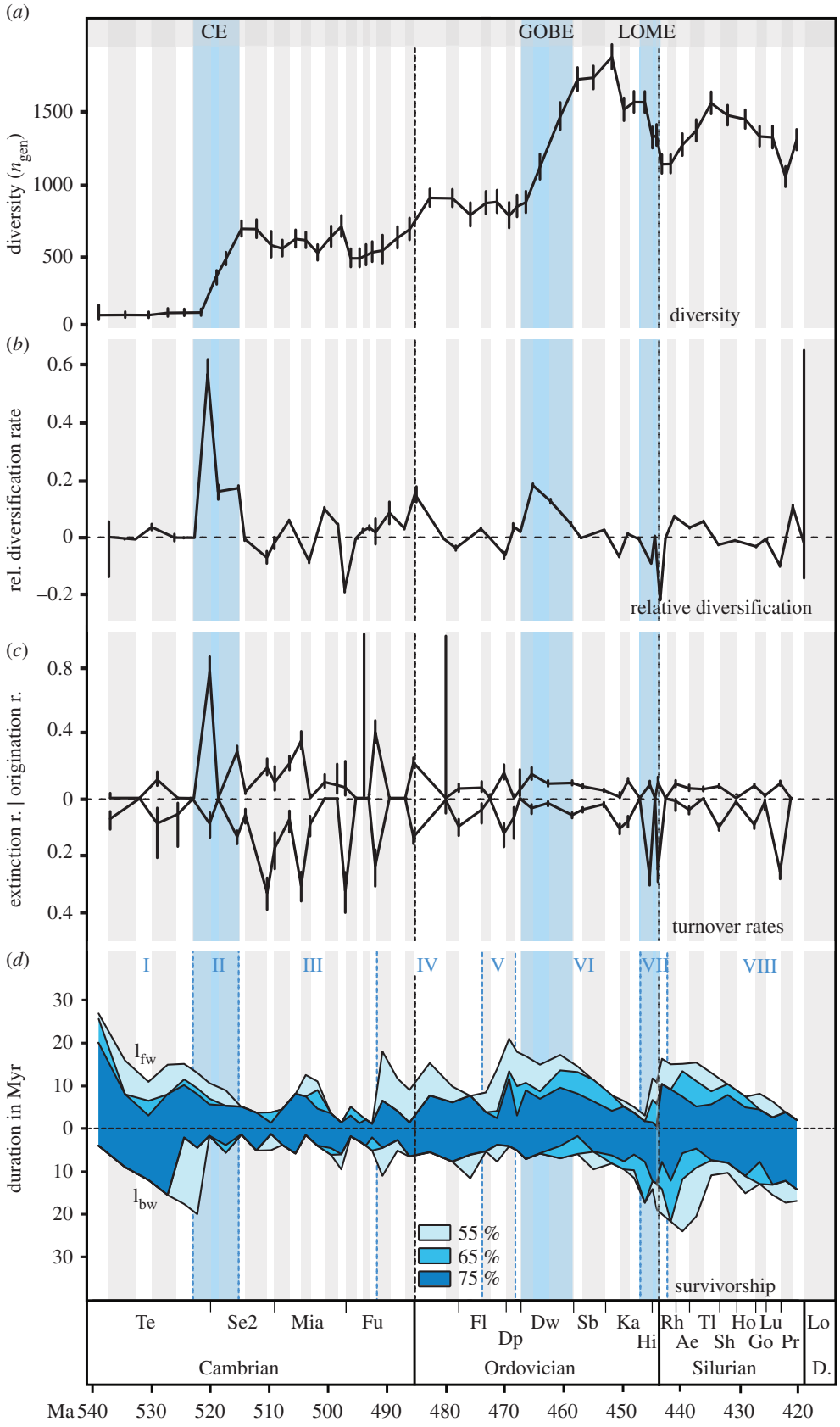
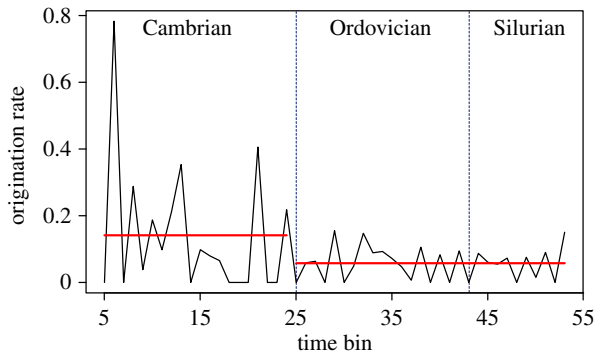
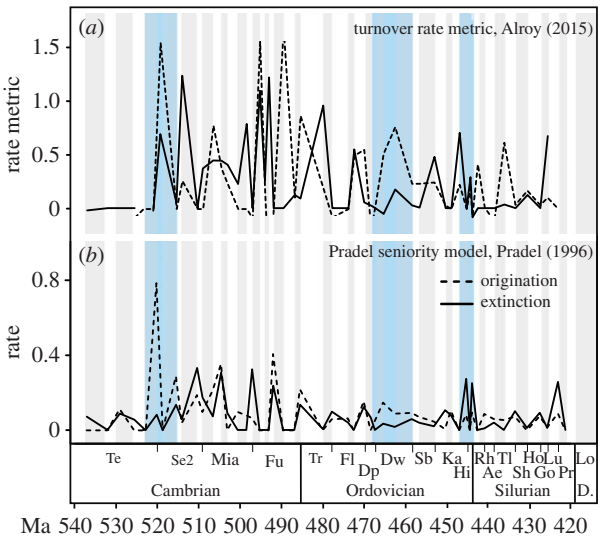
Corrected electronic supplementary material, figure S2. Early Palaeozoic curves of genus-level origination (hatched lines) and extinction (continuous lines) calculated with the metric of Alroy [5] (*a*) and as rates calculated with the CR-approach (*b*). Abbreviations: Ae, Aeronian; CE, Cambrian Explosion; D., Devonian; Dp, Dapingian; Dw, Darriwilian; Fl, Floian; Fu, Furongian; Go, Gorstian; GOBE; Great Ordovician Biodiversification Event; Hi, Hirnantian.; Ho, Homerian; Ka, Katian; Lo, Lochkovian; Lu, Ludfordian; Mia, Miaolingian; Pr, Pridolian; Rh, Rhuddanian; Sb, Sandbian; Se2, Cambrian Series 2; Sh, Sheinwoodian; Te, Terreneuvian; Tl, Telychian; Tr, Tremadocian.



Corrected figure 1.



Corrected figure S1



Corrected figure S2.

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