Gmail

Avery Orrall <avery@retractionwatch.com>

Media Request: News & Views article citing retracted article

Creanza, Nicole <nicole.creanza@vanderbilt.edu> Fri, May 15, 2026 at 1:14 PM
To: Avery Orrall <avery@retractionwatch.com>, "Snyder, Katherine T" <katherine.t.snyder@vanderbilt.edu>

Dear Avery,

Thank you for reaching out! Yes -- when Nature offered us the choice between retracting the News & Views or adding an update note, we proposed an update because we thought that our commentary contained important methodological context that remained useful even after the Alam et al. was retracted.

In the original Alam et al. paper, the authors constructed a UMAP projection of zebra finch syllable spectrograms, and then generated a "path length" measurement for a song based on the distances on the UMAP between the syllables that made up that song.

Overall, about 20% of our commentary on this paper covered the results that Alam et al. reported. In the rest, we put a lot of effort into two things: 1. making sure that readers could better interpret UMAP methods for themselves, and 2. cautioning readers about constructing one UMAP projection and then interpreting between-point distances as meaningful representations of the underlying data. In other words, we thought the methodology they used to construct their path length should not be repeated in subsequent work, and we wanted readers to understand why.

The retraction of this article states that "one of the synthetic song pairs used in the female preference test (data in Fig. 3c,d) was shown to be reliable in its ranking of short versus long path length only 35% of the time and a second song pair was reliable only 75% of the time."

By extension, the path length of all of the songs analyzed in their data had varying degrees of inaccuracy in their proposed metric. Averaging over many runs, as we recommend in the commentary, would have addressed this problem, but this averaging would not address that a distance in UMAP-space depends heavily on the parameters chosen for analysis and isn't a property of the underlying data. It also would not address other issues with the proposed metric, such as that the authors could not link a syllable's location on the UMAP projection to any measured properties of that syllable.

In our opinion, the retraction should have noted broader methodological concerns with the paper, not just an issue with these two song pairs.

We chose to keep our commentary online with the passage below included, so that our cautions about implementing and interpreting UMAP would be available for readers to learn from.

- **Update 15 April 2026**: The paper discussed in this News & Views has been retracted because key synthetic song pairs used in the female-preference experiment were not reliably ranked as short versus long path-length across repeated UMAP projections. The broader discussion in this News & Views remains relevant, but the passages that interpret the female-preference result, and related inferences about path length as an indicator of song quality, should be read with the retraction in mind.

Further methodological discussion around this manuscript can be found in the publicly available Peer Review Document for the original article (https://static-content.springer.com/esm/art%3A10.1038%2Fs41586-024-07207-4/MediaObjects/41586_2024_7207_MOESM2_ESM.pdf) and a preprint critique by Bulla, Sankar, and Forstmeier (https://ecoevorxiv.org/repository/view/7530/) that elaborates on the path-length metric's reliability and other concerns.

Please let us know if you have any other questions, and best of luck with the piece.

All the best,
Nicole and Kate

From: Avery Orrall <avery@retractionwatch.com>
Sent: Thursday, May 14, 2026 12:36 PM
To: Snyder, Katherine T <katherine.t.snyder@vanderbilt.edu>; Creanza, Nicole <nicole.creanza@vanderbilt.edu>
Subject: Media Request: News & Views article citing retracted article

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