Erratum to
Preimage Entropy for Mappings
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pp.1815-1843

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Two sets of corrections need to be made to our paper.

pp. 1824-5: We missed some typographical errors which might make the proof of Prop. 3.3 difficult to read:

- p. 1824, left column:
  - line -19 in two places in the display, ”if i ∈” should read ”if p_i ∈”
  - line -15 ”f_0^{-N}(i)” should read ”f^{-N}(x_i)”
  - line -12 ”f_0^{-N}(1)” should read ”f^{-N}(p_1)”
  - line -10 ”f_0^{-N}(2)” should read ”f^{-N}(p_2)”

- p. 1825, right column, line 6: ”<\frac{1}{2}” of δ_2” should read ”< \frac{\delta_2}{2}”

pp.1838-9: We thank Yujun Zhu (Hebei Normal University, Shijiazhuang, PR China) for pointing out to us an error in the proof of theorem 6.4: On page 1839, left column, third display, the inequality

\[ N(P_n) \leq (4E + 2)^n N(P_0) \]

is wrong. Here is a correction–in fact, an improvement, based on his (or her) suggestions:

1. In the definition of division (first full paragraph, p. 1838 left) we can add the condition that for each atom, at least one endpoint is not a vertex, and hence belongs to at most two distinct atoms. Then any assignment of a non-vertex endpoint to each atom is at most two-to-one, so that in the last sentence, we can say that a division by N points has at most 2N atoms.

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2. On p. 1839 left, the first display can now read

\[ A(P_n) \leq 2N(P_n) \]

and in the second, \([N(P_n) + 1]^2\) can be replaced by \(3N(P_n)\).

3. We then have, by construction of \(P_n\) and lemma 6.2, the inequality

\[ N(P_{n+1}) \leq 4E \cdot A(P_n) + 2N(P_n) \leq (8E + 2)N(P_n) \]

and the third display on p. 1839 left can read

\[ N(P_n) \leq (8E + 2)^n N(P_0) \]

so the next-to-last line in the fifth display now reads

\[ \leq \frac{1}{k} \lim_{N \to \infty} \frac{1}{N} \log(3N(P_N)). \]

Thus, in the last line of the fifth display, and in the sixth display,

\[ \frac{2}{k} \log(4E + 2) \]

can be replaced by

\[ \frac{1}{k} \log(8E + 2). \]

The end of the proof remains intact.

4. A similar change should be made in Remark 6.5: \(2 \log(4E + 2)\) should be replaced by \(\log(8E + 2)\) in the last display left and the first display right on p. 1839. (Of course, the next-to-last line in the first display right should have \(3N(P_n)\) in place of \([N(P_n) + 1]^2\) as well.)