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Correction

Correction: Fekete-Szegö problem for Bi-Bazilevič functions related to Shell-like curves

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Abstract: The purpose of this note is to give some mistyping corrections for our published article in [1].

Keywords: univalent functions; bi-univalent functions; shell-like function; Bazilevič function; Fibonacci number; Fekete-Szegö inequality **Mathematics Subject Classification:** 30C45, 30C50

A correction on

Fekete-Szegö problem for bi-Bazilevič functions related to Shell-like curves, by H. Orhan, N. Magesh and C. Abirami. AIMS Mathematics, 2020, 5(5): 4412–4423. DOI:10.3934/math.2020281.

These errata give the following correct statements for the corresponding statements on the cited page of our published article [1].

In page 4418, correcting the Eqs (2.6) and (2.8) as given below (0.1) and (0.2) respectively, with calculations as in pages 4417–4419, we obtain desired bounds as stated in Theorem 2.1. (page 4417). Since ξ and μ are missing in (2.6) and (2.8), now it is corrected and given as below:

$$(2\lambda + \mu) \left[\left(\frac{\mu - 1}{2} \right) a_2^2 + \left(1 + \frac{6\delta\xi}{2\lambda + \mu} \right) a_3 \right] = \frac{1}{2} \left(p_2 - \frac{p_1^2}{2} \right) \tau + \frac{3p_1^2}{4} \tau^2, \tag{0.1}$$

and

$$(2\lambda + \mu) \left[\left(\frac{\mu + 3}{2} + \frac{12\delta\xi}{2\lambda + \mu} \right) a_2^2 - \left(1 + \frac{6\delta\xi}{2\lambda + \mu} \right) a_3 \right] = \frac{1}{2} \left(q_2 - \frac{q_1^2}{2} \right) \tau + \frac{3q_1^2}{4} \tau^2.$$
(0.2)

The above corrected equations provide the corrected bound $|a_3|$ of Theorem 2.1, in page 4417 and page 4419 as follows:

$$|a_{3}| \leq \frac{\left\{ (2\,\lambda+\mu)\,(\mu-1)\,\tau+2\,(1-3\,\tau)\,(\lambda+\mu+2\,\delta\xi)^{2} \right\} |\tau|}{(2\,\lambda+\mu+6\,\delta\xi)\left[\left[(2\,\lambda+\mu)\,(\mu+1)+12\,\delta\xi \right] \tau+2\,(1-3\,\tau)\,(2\,\delta\xi+\lambda+\mu)^{2} \right]}$$

So, the aforementioned modifications correct the bound $|a_3|$ appeared in Corollaries 3.1 to 3.6.

Conflict of interest

The authors declare no conflict of interest.

References

 H. Orhan, N. Magesh, C. Abirami, Fekete-Szegö problem for bi-Bazilevič functions related to Shell-like curves, *AIMS Math.*, 5 (2020), 4412–4423.



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