Erratum

Directed Projection Functions of Convex Bodies (Monatsh. Math. 149, 43–64 (2006))

By

Paul Goodey^{1,*} and Wolfgang Weil^{2,*}

¹ University of Oklahoma, Norman, OK, USA

² Universität Karlsruhe, Germany

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A comparison of the definitions of $\bar{v}_{1,j}(K; \cdot)$ and M_j^d in the above article shows that

$$M_j^d h(K; \cdot) = \kappa_{j-1} \bar{v}_{1,j}(K; \cdot).$$

The factor κ_{j-1} is missing in line 5 of Section 3.2, and in the following formulas: the second line of formula (11), the left-hand side of formula (12), and the right-hand side of the first displayed formula in the proof of Lemma 1.

In the discussion of the body K_s (at the end of Section 3.2), $\bar{v}_{1,2}(K_s; \cdot)$ has, therefore, to be replaced by $2\bar{v}_{1,2}(K_s; \cdot)$ (since $\kappa_1 = 2$).

Finally, the relation between the operators M_j^d and A_j^d given in the proof of Theorem 7 simplifies to

$$M_j^d f = A_j^d f,$$

for even functions f . Here, besides the missing factor κ_{j-1} , it has to be observed that in the formula from [15] which express $A_j^d f$ in terms of Radon transforms the factor σ_{j-1} has to be corrected to σ_j .

The fact that M_j^d and A_j^d agree on even functions may seem surprising. However, it has a geometric explanation arising from the connection of A_j^d to a different kind of directed projection function which is studied in the paper

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