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# CORRECTION OF "OPTIMAL BOUNDS FOR LINEAR FUNCTIONALS ON MONOTONE FUNCTIONS"

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In the statement of Theorem 4, functions

$$+g_\theta(x) = \begin{cases} -\dfrac{b-\theta}{(b-a)H_0(\theta)}, & a<x<\theta, \\ \dfrac{\theta-a}{(b-a)H_0(\theta)}, & \theta<x<b, \end{cases} \qquad a<\theta<b, \tag{3.5}$$

should be replaced by

$$+g_\theta(x) = \begin{cases} -\left[\dfrac{b-\theta}{(\theta-a)(b-a)}\right]^{1/2}, & a<x<\theta, \\ \left[\dfrac{\theta-a}{(b-\theta)(b-a)}\right]^{1/2}, & \theta<x<b, \end{cases} \qquad a<\theta<b. \tag{3.5'}$$

Functions (3.5') belong to (1.3) and form a parametric family of candidates for attaining the upper bounds on the functionals (1.1) over (1.3). Functions (3.5) belong to (3.7) and form a parametric family of candidates for attaining the upper bounds on the norm functionals over (3.7). The proof of inequality (3.4) is correct. The proof of its attainability conditions should be completed by adding the following argument at the beginning of the proof of Theorem 4.:
We first check that

$$\int_a^b g_\theta(x)h(x)dx = \int_a^b g_\theta(x)h_0(x)dx = -H_0(\theta)\left[\frac{b-a}{(\theta-a)(b-\theta)}\right]^{1/2}, \quad a<\theta<b,$$

which asserts that the optimal upper bound is not less than the right-hand side of (3.4). We prove that they are identical.

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