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Erratum to: An implicit method for finding a common fixed point of a representation of nonexpansive mappings in Banach spaces

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Unfortunately, the original version of this article [1] contained an error. In Theorem 3.1 the condition 'left amenable' is required instead of the condition 'left invariant', because the authors used the Lemma 2.2 and in that lemma 'X' is amenable.

The correct Theorem 3.1 is correctly included in full in this erratum:

Theorem 3.1 Let S be a semigroup. Let C be a nonempty compact convex subset of a real strictly convex and reflexive and smooth Banach space E. Suppose that $S = \{T_s : s \in S\}$ is a representation of S as nonexpansive mapping from C into itself such that $\mathrm{Fix}(S) \neq \emptyset$. Let X be a left amenable subspace of B(S) such that $1 \in X$, and the function $t \mapsto \langle T_t x, x^* \rangle$ is an element of X for each $x \in C$ and $x^* \in E^*$. Let $\{\mu_n\}$ be a left regular sequence of means on X. Suppose that f is an α -contraction on C. Let ϵ_n be a sequence in (0,1) such that $\lim_n \epsilon_n = 0$. Then there exists a unique sunny nonexpansive retraction P of C onto $\mathrm{Fix}(S)$ and $x \in C$ such that the following sequence $\{z_n\}$ generated by

$$z_n = \epsilon_n f(z_n) + (1 - \epsilon_n) T_{u_n} z_n \quad (n \in \mathbb{N}), \tag{1}$$

strongly converges to Px.

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References

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