Approximative compactness and

continuity of metric projections:

Corrigendum

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There is a small error in the proof of Lemma 1 [1], namely, that there may not be a subsequence of the sequence $\{\phi_n\}$ converging to ϕ in the weak*-topology. Thus equation (5) should read: In view of continuity of P_K we have

$$(5) \qquad \lim_{n\to\infty} \phi_n\big(x-P_K(x)\big) = \|x-P_K(x)\| = \lim_{n\to\infty} \phi_n'\big(x-P_K(x)\big) \ .$$

The same error occurs in the proof of Theorem 1 and Lemma 2 also. Therefore, equation (7) should read

$$(7) \qquad \frac{d_K\big(x+t_n\big(x-P_K(x)\big)\big)-d_K(x)}{t_n} \le t_n + \phi_n\big(x-P_K(x)\big)$$
$$\le t_n + \|x-P_K(x)\| \ ,$$

and this leads to $\lim_{n\to\infty} \phi_n\big(x-P_K(x)\big) = \|x-P_K(x)\|$. Similarly, equation (8) should read

$$(8) \qquad \|g_n\| = \psi_n\big(g_n-x+x\big) \le \|x-g_n\| + \psi_n(x)$$
$$\le \|x-g_n\| + \|x\| \ ,$$

which implies that $\psi_n(x) \to \|x\|$. Then there is no need of taking a subsequence.

All the same the results are not affected by the above error.

Reference

[*1*] B.B. Panda and O.P. Kapoor, "Approximative compactness and continuity
        of metric projections", *Bull. Austral. Math. Soc.* 11 (1974),
        47-55.

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