

ERRATUM TO "THE NONSTANDARD THEORY OF TOPOLOGICAL VECTOR SPACES"

BY

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The authors are indebted to Steven F. Bellenot for pointing out an error in the proof of Theorem 6.2 (i). (The $\sigma(F, E)$ -continuity of g on U^0 need not imply the $\sigma(F, E)$ -continuity of g on the span of U^0 .)

The following is a brief sketch of a proof of Theorem 6.2 (i). By Theorem 16.8 of [2], for each θ -neighborhood U of 0, each finite subset $y_1, y_2, \dots, y_n$ of F and each $\epsilon > 0$, there exists $x \in E$ such that $|\langle x, y \rangle - \langle g, y \rangle| < \epsilon$ for all $y \in \text{span} \{y_1, \dots, y_n\} + U^0$. In particular $\langle x, y_i \rangle = \langle g, y_i \rangle$ for $i = 1, 2, \dots, n$. Hence there exists $p \in {}^*E$ such that $\langle p, q \rangle = {}_1 \langle g, q \rangle$ for $q \in M_\theta$ and $\langle p, {}^*y \rangle = \langle g, y \rangle$ for $y \in F$. Then $p \in [M_\theta \cap \mu_{\sigma(F, E)}(0)]^i = \text{pns}_\theta({}^*E)$, since g is $\sigma(F, E)$ -continuous on each θ -equicontinuous subset of F , and so p satisfies the required conditions.

REFERENCES

1. C. Ward Henson and L. C. Moore, Jr., *The nonstandard theory of topological vector spaces*, Trans. Amer. Math. Soc. 172 (1972), 405-435.
2. J. L. Kelley, and I. Namioka, *Linear topological spaces*, University Series in Higher Math., Van Nostrand, Princeton, N. J., 1963. MR 29 #3851.

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