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ERRATA TO "OPEN, CONNECTED FUNCTIONS"

BY LOUIS FRIEDLER

In the proof of Theorem 2.4 of [1] instead of letting $G(E) \subseteq U \cup V$, let $G(E) = U \cup V$ where $\overline{U} \cap V = \phi$ and $\overline{V} \cap U = \phi$. Then as in the original proof, $E = p_X(U) \cup p_X(V)$ and $p_X(U) \cap p_X(V) = \phi$. Let $x \in p_X(V)$ and pick $(x, y) \in V$. Let $Z_1 \times Z_2$ be a basic neighborhood of (x, y) for which $(Z_1 \times Z_2) \cap U = \phi$. Since F is l.s.c., there is some neighborhood Z of x for which $z \in Z \cap E$ implies $F(z) \cap Z_2 \neq \phi$ so that for $z \in Z \cap Z_1 \cap E$, $p_X^{-1}(z) \cap ((Z \cap Z_1) \times Z_2) \neq \phi$. But then $p_X^{-1}(z)$ cannot be contained in U and thus cannot intersect U. It follows that $E \cap (Z \cap Z_1) \cap p_X(U) = \phi$ so that $x \notin cl_E p_X(U)$. Thus, $cl_E p_X(U) \cap p_X(V) = \phi$ and similarly $cl_E p_X(V) \cap p_X(U) = \phi$ so that E is not connected. The result now follows as before.

Reference

1. Louis Friedler, Open, connected function, Can. Math. Bull. 16 (1973), 57-60.