CORRECTION TO "A NOTE ON COMPLETELY METRIZABLE SPACES"

E. MICHAEL

Josef Chaber has kindly pointed out that the proof of Theorem 1.3 must be modified, since, with the given construction, the claim that the collection $\mathcal{F}$ in the last paragraph is a filter base cannot be justified. The required modification comes at the beginning of paragraph two: Instead of invoking Lemma 2.1 to independently order each $U_n$, one invokes Proposition 4.1 to obtain a complete sieve $\{\{U_\alpha : \alpha \in A_n\}, \pi_n\}$ on $X$ satisfying 4.1(c). The remainder of the proof is then essentially correct; one need only verify that, if $\alpha_n \in A_n$ is as in the last paragraph, then $\pi_n(\alpha_{n+1}) = \alpha_n$ for all $n$.

To verify this equality, one first checks that, if $\alpha \in A_n$ and $\beta \in \pi_n^{-1}(\alpha)$, then $V_\beta \subset V_\alpha$ (hence $W_\beta \subset W_\alpha$) and $D_\beta \subset D_\alpha$, and therefore $E_\beta \subset E_\alpha$. In particular, $E_{\alpha_{n+1}} \subset E_{\pi_n(\alpha_{n+1})}$, so $y$ is in both $E_{\pi_n(\alpha_{n+1})}$ and $E_{\alpha_n}$. But, by the third paragraph of the proof, we have $E_\alpha \cap E_{\alpha'} = \emptyset$ whenever $\alpha, \alpha' \in A_n$ with $\alpha \neq \alpha'$, and thus $\pi_n(\alpha_{n+1}) = \alpha_n$.


DEPARTMENT OF MATHEMATICS, UNIVERSITY OF WASHINGTON, SEATTLE, WASHINGTON 98195