Corrigendum

M. E. Adams and Matthew Gould: 'Posets whose monoids of order-preserving maps are regular', *Order* 6 (1989), 195–201.

In the paper cited above, we gave a characterization of those posets P for which the monoid $\text{End}(P)$ of order-preserving maps of P into itself is regular (in the semigroup-theoretic sense). We have since learnt that such posets had already been characterized in A. Ya. Aĭzenshtat, 'Regular semigroups of endomorphisms of ordered sets' (Russian), *Leningrad. Gos. Ped. Inst. Učen. Zap.* 387 (1968), 3–11. (An English translation appears in 'Nineteen Papers on Algebraic Semigroups', *Amer. Math. Soc. Translations*, Series 2, Volume 139, 1988, 29–35.)

Posets P for which $\text{End}(P)$ is regular are either of height ≤ 2 or totally ordered. Our characterization coincides with Aĭzenshtat's in the former case but differs for totally ordered sets, as we now indicate.

Let P be a totally ordered set. For $Q \subseteq P$, a gap in Q is *absolute* if it also determines a gap in P . For each $Q \subseteq P$, define a relation ρ_Q over the set of embeddings of Q into P by $f\rho_Q g$ if and only if, for every gap (I, F) in Q , if $(g(I), g(F))$ is an absolute gap in $g(Q)$ then $(f(I), f(F))$ is an absolute gap in $f(Q)$. Aĭzenshtat showed that $\text{End}(P)$ is regular if and only if ρ_Q is symmetric for every $Q \subseteq P$. Associated with each gap (I, F) in P is a pair (α_I, β_F) where α_I is the co-finality of I and β_F is the co-initiality of F . We showed that $\text{End}(P)$ is regular if and only if, for every gap (I, F) in P , $\alpha_I + 1 + \beta_F^*$ is not embeddable in P (in which case there are only finitely many gaps).

We offer our apologies to Professor Aĭzenshtat for overlooking her paper.

M. E. Adams
Matthew Gould