Erratum to: Chaotic actions of topological semigroups

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Received: 21 September 2013 / Published online: 23 October 2013
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Erratum to: Semigroup Forum DOI [10.1007/s00233-013-9517-4](https://doi.org/10.1007/s00233-013-9517-4)

By just partially carrying out corrections requested by the authors after the receipt of the page proofs, Springer introduced two errors into our manuscript:

- (1) In the statement of Lemma [3.11](#), the word “regular” is superfluous.
- (2) In the proof of Lemma [3.11](#), the fourth sentence has to be deleted.

Springer accepts that the problem is entirely a publisher’s fault and apologises.

For the sake of completeness we shall state here the correct text of Lemma [3.11](#) and its proof:

Lemma 3.11 *Let S be a topological semigroup and φ a continuous action of S on some Hausdorff space X . If φ is topologically transitive and periodic, then φ is algebraically transitive.*

Communicated by Norman R. Reilly.

The online version of the original article can be found under doi:[10.1007/s00233-013-9517-4](https://doi.org/10.1007/s00233-013-9517-4).

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Proof Let $x \in X$ and let $K \subseteq S$ be a compact subset such that $KS(\varphi) = S$. Suppose that $X \neq \varphi(K, x)$, and let $y \in X \setminus \varphi(K, x)$. Since X is Hausdorff and $\varphi(K, x)$ is compact in X , there exist an open neighborhood V of y in X and an open neighborhood W of $\varphi(K, x)$ in X such that $V \cap W = \emptyset$. By Lemma 2.5, there exists an open neighborhood U of x in X such that $\varphi(K, U) \subseteq W$, whence $\varphi(K, U) \cap V = \emptyset$. However, as $KS(\varphi) = S$ and therefore $\varphi(K, U) = \varphi(S, U)$, this contradicts topological transitivity. Thus, $X = \varphi(K, x)$. $\square$