CORRIGENDUM

A NOTE ON MY PAPER "NOTES ON COMPACT
SEMIGROUPS WITH IDENTITY"

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As I noticed only too late, a number of typing errors and
omissions have occurred in my recent paper [1]. Further-
more the examples Q(m), m > 1 of [1] 1.24 are actually not
right topological semigroups as stated. The present note
gives corrections to these errors.

1. In the proof of 1.15. the sentence "Then $1 = \lim h_m^{-1} h_m =$
$= kh, k = h^{-1}$" should read "Then $1 = \lim h_m h_m^{-1} = hk, k = h^{-1}$".

2. In construction 1.23., definition (9), $\phi_k^*(0,ab^{-1})$ should
be replaced by $\phi_k^*(0,ba^{-1})$.

3. In construction 1.24., definition (9'), $\phi^*(0,ab^{-1})$ should
be replaced by $\phi_k^*(0,ba^{-1})$. However, (9') does not suffice
to make Q(m) into a right topological semigroup. It has
been overlooked that for $b_n \to 0$, and $i = 2m + k + 1$
$\phi_i^*(0,a)\phi_k^*(0,b_n a^{-1})$ converges to $\phi_k^*(0,0) \neq \phi_i^*(0,0)$. In
order to get a right topological semigroup, we have to
identify $o = \phi_1^*(0,0)$ and $o' = \phi_2^*(0,0)$. The resulting semi-
group is also semitopological, but its underlying topo-
logical space is not a surface. The statements about the
ideals of Q(m) should be altered accordingly. The statement
about Q(O) is correct.

4. In the definition of the topology of S in Construction
1.25. the intersection $\bigwedge_{i=1}^{n} \phi_i^{-1}(e_i O_2)$ is to be replaced by
$\bigwedge \{\phi_i^{-1}(e_i O_2) \mid i \in I\}$.

5. In 2.10., 2.12. and 2.13. it was tacitely assumed that H(1) is connected. Thus, this assumption should be added to 2.10., 2.12., 2.13., or the general assumption 2.1.(iv) changed into "H(1) is connected".

6. In the proof of Lemma 2.9. "$f(p) \notin K \setminus G = A_1 \cup A_2$" should read "$f(p) \notin O_1 \cup O_2$".

7. In the statement of Lemma 2.12. a bar is missing over $F_r(x)$ in $\overline{F_r(x)} \cong \mathbb{R}_\delta$. In the proof, "$(\mathbb{R},+) \circledS (\mathbb{R}, \cdot)$" should read $(\mathbb{R},+) \circledS (\mathbb{R}^+, \cdot)$.

8. In the proof of 2.13.(i), the statement "$xSx = x\overline{F_r(x)}\overline{F_1(x)}x = \{x\}$" is not obvious from the context. Thus the paragraph is best replaced by the following:

"By a result of Berglund-Hofmann [3] p. 140, M(S) is a group H(m), so $F_r(x) = F_r(m) = F_1(m) = F_1(x)$ for every $x \in M(S)$. If $x \notin M(S)$, let e,e' be the idempotents in $\overline{F_r(x)}\setminus F_r(x)$ and $\overline{F_1(x)}\setminus F_1(x)$ respectively (2.12). Then $e'Se = e' \overline{F_1(x)F_r(x)} e = \{e'e\}$, thus $e'xe = x = e'e \in M(S)$, a contradiction".

9. In the proof of theorem 2.18. the sentence beginning with "Consequently, S is the union ..." should read "Consequently, S is the union of 4m copies of J, every two of which have at most an edge and the vertex $m \in M(S)$ in common". I_k and I_1 below should be replaced by J_k and J_1.

10. In theorem 2.19., statement (iii) should clearly contain the assumption "if A is not a group".

[1] RUPPERT,W.: Notes on compact semigroups with identity Semigroup Forum 14, (1977), 199-234.

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