SOME REMARKS ON SEMIGROUP PRESENTATIONS: CORRIGENDUM AND ADDENDUM

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I am indebted to Mr. Bruce G. Neill, an undergraduate student at the University of Queensland, for drawing my attention to an error in the first proof, p. 1020, of Theorem 3.1 of **(1)**: the elements (g_a, c^n) do not form a semigroup isomorphic to A'. The alternative proof sketched further down the same page is correct, and also establishes the corollary. I am also indebted to Dr. Mario Petrich, of The Pennsylvania State University, for drawing my attention to the paper **(2)** by Šutov, which contains, *inter alia*, my Theorem 3.1, but proved by a quite different, combinatorial method.

REFERENCES

1. B. H. Neumann, *Some remarks on semigroup presentations*, Can. J. Math., *19* (1967), 1018–1026.

2. È. G. Šutov, *Embedding semigroups in simple and complete semigroups*, Mat. Sbornik (N.S.), *62*, 104 (1963), 496–571.

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EXTENSIONS OF I-BISIMPLE SEMIGROUPS*: ERRATA

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Page 420, line 5: Replace $g\alpha^{p-r}h\alpha^{m-r}$ by $f_{p-r,n}^{-1}\, g\alpha^{p-r}f_{m-r,p}^{-1}f_{p-r,m}\, h\alpha^{m-r}f_{m-r,q}$ and replace $m + q - p$ by $m + q - r$.

Page 420, lines 6 and 7 should read: "where for $s \in I^0$, $t \in I$, $f_{0,t} = e$, the identity of G, while if $s > 0$, $f_{s,t} = u_{t+1}\alpha^{s-1}u_{t+2}\alpha^{s-2} \ldots u_{t+(s-1)}\,\alpha u_{t+s}$, where $\{u_t\colon t \in I\}$ is a collection of elements of G with $u_t = e$ if $t > 0$ and . . . ."

Page 420, line 25 should read: "$W = \{(\beta, a)\colon \beta \in M(I, G), a \in I,$ and $(i + 1)\beta = u_{i+1}^{-1}(i\beta)\alpha u_{i+1+a}\}$."

Page 420, line 26: Omit "H is . . . of $M(I, G)$."

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Page 420, line 27: Omit "$=H \times I$."

Page 420, line 29: Replace "H" by "$M(I, G)$."

Pages 421, 422: The modifications in the proof of Theorem 1, due to the above, will be clear.

Page 425, line 13: Insert between "(" and "see": "$H = (\beta \in M(I, G)$: $(\beta, a) \in W$ for some $a \in I$)."

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THE ISOMORPHISM OF CERTAIN CONTINUOUS RINGS*: CORRIGENDUM AND ADDENDUM

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1. Page 1337, line 6: $v_{i,n-2}$ should be $v_{i,2n-2}$.
2. Page 1339, line 21: $\psi(u_{2n-1}\, v_{2n-1})$ should be $\psi(v_{2n-1}\, u_{2n-1})$.
3. Page 1340, line 13: $\bigcup_{A \in \mathfrak{A}} A(\mu)$ should be $\{A(\mu) | A \in \mathfrak{A}\}$.
4. Page 1341, line 10 should read: "when all $v_{2n+1}{}^{t}$ and all $v_j{}^{n+1}$ are replaced by 1."
5. Page 1341. Lemma 5 holds with hypothesis (i) omitted and even if the ring D fails to be a division ring (but U and V are required to be division rings). Moreover, Lemma 5 is an easy corollary of Lemma 1; to see this, observe first that (ii) of Lemma 5 implies

(ii)′ $\sum_{i=1}^{N} u_i v_i = 0$, $u_i \in U$, $v_i \in V$, *and* $v_1, \ldots, v_N$ *Z-independent, together imply all* $u_i = 0$.

(To deduce (ii)′, write

$$u_i = \sum_{j=1}^{r} w_j z_{ji}$$

with all $z_{ji} \in Z$ and $w_1, \ldots, w_r$ all in U and Z-independent.) Next, to prove Lemma 5 it suffices to consider the case that $v_1, \ldots, v_N$ are Z-independent; hence because of (ii)′ it can be assumed that all $v_i = 1$, i.e., that

$$\sum_{i=1}^{N} u_i{}^1 x u_i{}^2 = 0$$

for all $x \in U$. Lemma 1 now applies.

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