CORRECTION TO COMPOSITIONS OF SEMIGROUPS

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In Theorem 2′ of my paper mentioned in the title (These Reports Vol. 8, No. 3, (1956), pp. 107—111), every S_δ was assumed to be a commutative semigroup having only one idempotent. But this condition was insufficient for the validity of my discussions.

In fact, let

$$L = \{\alpha, \beta\};\ \alpha^2 = \alpha,\quad \beta = \alpha\beta = \beta\alpha = \beta^2,$$

$$S_\alpha = \{e\};\ e^2 = e,$$

$$S_\beta = \{0, a, a^2, a^3, \cdots\};\ a^i a^j = a^{i+j} \text{ and } a^i 0 = 0 a^i = 0 \text{ for any } i, j.$$

Then $S(\odot)$ becomes a commutative compound semigroup of $\{S_\alpha, S_\beta\}$ by L if product $\odot$ therein is defined such that

$$e \odot x = x \odot e = x \qquad \text{for any} \quad x \in S_\beta,$$

$$e \odot e = e,$$

$$x \odot y = xy \qquad \text{for any} \quad x, y \in S_\beta.$$

However, this product $\odot$ can not be obtained from the relation (P) by any transitive system $\{\varphi_{\alpha,\alpha},\ \varphi_{\alpha,\beta},\ \varphi_{\beta,\beta}\}$ of homomorphisms.

So, the condition of S_δ stated in Theorem 2′ should be corrected as follows:

Every S_δ is a commutative hypogroup.

It is clear that this condition of S_δ is sufficient for the validity of our theorem.

As a matter of course, the words 'commutative semigroup having only one idempotent' and 'idempotent e_δ' in Remark of p. 110 should be corrected such as 'commutative hypogroup' and 'unit e_δ' respectively, too.

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