Correction to

"ON TERMINATING PROLONGATION PROCEDURES"

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M. Kuranishi has kindly brought to our attention an error in Theorem 1 on page 579. Condition (2) of that theorem should be corrected to read:

$$\text{``(2)} \quad dB_{\varphi;ij;k_1\cdots k_t} \equiv 0 \textit{ modulo } (\omega^i, \theta^\alpha) \textit{ for all } t.\text{''}$$

The above equation does not follow from the original hypotheses as the author indicated.

Since the interest in Theorem 1 is in its applicability as a criterion for involutiveness, it may be helpful to mention the following conditions under which (2) holds, assuming condition (1).

Condition 1. The θ^α and ω^i span $dx^1, \cdots, dx^n$.

Condition 2. $\omega^i = dy^i$, $i = 1, \cdots, p$ and $dB_{\varphi;ij} \equiv 0$ modulo (ω^i).

Under Condition 1, there are no π^λ, hence no additional variables are introduced by the prolongation process.

Under Condition 2, $B_{\varphi;ij}$ is a function of $y^1, \cdots, y^p$ alone. Consequently $dB_{\varphi;ij} = (\partial B_{\varphi;ij}/\partial y^k)\omega^k$, hence $B_{\varphi;ij;k} = (\partial B_{\varphi;ij}/\partial y^k)$ is also a function of $y^1, \cdots y^p$ alone. In the same way every $B_{\varphi;ij;k_1\cdots k_t}$ is a function of $y^1, \cdots, y^p$ alone.

Condition 1 is satisfied in Theorem 2 on page 581. Condition 2 is satisfied in the system (S') on page 220 studied in the paper, H. H. Johnson: "On the pseudo-group structure of analytic functions on an algebra," Proc. Amer. Math. Soc. 12 (1961), 218-224. Princeton University.