ERRATUM to

S. GÄHLER: Contribution to the Theory of Generalized Derivatives. Z. Anal. Anw. 5 (1986), 367–376.

On page 368 and 369 some of the symbols $\mathcal{D}$, $<$, $=$ which are printed normal according to the manuscript had to be set in another way. The text is correct as follows:

II. Now let S be an ordered inner product space and $(\cdot, \cdot)$ be its inner product. (The fact that the symbol $(\cdot, \cdot)$ is also used to denote the open interval cannot lead to any confusion.) Let us write

$$f(q) \begin{Bmatrix} >_K \\ =_K \\ <_K \end{Bmatrix} 0 \quad \text{if} \quad (f(q), K) \begin{cases} \subseteqq [0, \infty), & \text{but} \neq \{0\} \\ = \{0\} \\ \subseteqq (-\infty, 0], & \text{but} \neq \{0\} \end{cases}$$

where $(f(q), K) = \{(f(q), k)/k \in K\}$. Let $f(q) =_K' 0$ if there exists a neighbourhood U of the point 0 in R with $q + U \subseteqq Q$ and $(f[q + U], K) = \{0\}$ where $(f[q + U], K) = \{(s, k)/s \in f[q + U], k \in K\}$. Moreover let $f(q) >_K' 0$ $(<_K' 0)$ if not $f(q) =_K' 0$, but if there exists a neighbourhood U of the point 0 in R with $q + U \subseteqq Q$ and $(f[q + U], K) \subseteqq [0, +\infty)$ $((-\infty, 0])$. For arbitrary $g: Q \to S$ let

$$\mathcal{D}g_f(q) = \begin{cases} D_l g(q) & \text{if} \quad f(q) >_K 0 \\ D_l g(q) \cup D_u g(q) & \text{if} \quad f(q) =_K 0 \\ D_u g(q) & \text{if} \quad f(q) <_K 0 \\ \emptyset & \text{otherwise} \end{cases}$$

$$\mathcal{D}' f_g(q) = \begin{cases} D_l f(q) & \text{if} \quad g(q) >_K' 0 \\ D_l f(q) \cup D_u f(q) & \text{if} \quad g(q) =_K' 0 \\ D_u f(q) & \text{if} \quad g(q) <_K' 0 \\ \emptyset & \text{otherwise.} \end{cases}$$

Theorem 1: *If g is continuous at q, then*

$$(f(q), \mathcal{D}g_f(q)) + (\mathcal{D}' f_g(q), g(q)) \subseteqq D_l(f, g)(q).$$

Proof: Assume $\mathcal{D}g_f(q)$ and $\mathcal{D}' f_g(q)$ are not empty. Let $f(q) >_K 0$ and $g(q) >_K' 0$ and for arbitrary $\gamma \in D_l g(q)$ and $\phi \in D_l f(q)$ let $\psi = (f(q), \gamma) + (\phi, g(q))$. Then

⋮

Hence we have $\psi \in D_l(f, g)(q)$ which proves the assertion of the theorem in the case $f(q) >_K 0$ and $g(q) >_K' 0$. The other cases can be proved analogously ∎