

Corrigendum to
“Weak Solutions of a Class
of Quasilinear Hyperbolic Integro-Differential
Equations Describing Viscoelastic Materials”

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It was pointed out in [1] that a proof in my paper contains a gap. Specifically, the authors of [1] observe that instead of the estimate

$$(3.26) \quad \|J_s v_n - v_n\| \leq \omega(s)$$

in that paper only the weaker estimate

$$(3.26') \quad \|J_s v_n - v_n\| \leq \omega(s) + 2C\sqrt{\varepsilon_n}$$

can be deduced. The gap can be closed as follows.

Change (3.26) to the estimate (3.26'). After the sentence containing this estimate, insert the following paragraph:

For a given δ , we now pick N so large that $2C\sqrt{\varepsilon_n} \leq \delta/2$ for all $n \geq N$ and then $t > 0$ so small that for $s \leq t$, we have $\omega(s) \leq \delta/2$ and $\|J_s v_n - v_n\| \leq \delta$ for all $n \leq N$. This is possible since the J_s form a C_0 -semigroup. Then $\|J_s v_n - v_n\| \leq \delta$ for all n if $s \leq t$, and thus $\|J_s v_n - v_n\| \rightarrow 0$ uniformly in n . After possibly changing the modulus of continuity $\omega(\cdot)$, the term $2C\sqrt{\varepsilon_n}$ can therefore be dropped from the right-hand side of (3.26').

With this argument, (3.26) still holds as stated in the paper, and the rest of the proof remains unchanged. I am grateful to HAMID BELLOUT, FREDERICK BLOOM, and JINDRICH NEČAS for pointing out this problem.

1. H. BELLOUT, F. BLOOM & J. NEČAS, Existence of Global Weak Solutions to the Dynamic Problem for a Three-Dimensional Elastic Body with Singular Memory. *SIAM J. Math. Anal.* **24** (1993), 36–45.

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