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FIXED POINT THEOREMS FOR OCCASIONALLY WEAKLY COMPATIBLE MAPPINGS, ERRATUM

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Abstract. We correct the errors that appeared in [1].
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We correct the errors that appeared in [1].
291^4, (X, d) should read (X, r).
291^5 Delete *such that* $f(X) \subset S(X)$,
291^8 s, y should read x, y
$291_9 - 291_8$ Insert a new line which reads:
Define $\psi : \mathbb{R}^+ \to \mathbb{R}^+$ which is upper semicontinuous, nondcreasing, and satisfying $\psi(t) < t$ for each $t > 0$.

Because important items were left out of inequality (6) in the statement of Theorem 3 in [1], we shall state the correct Theorem 3 and include a proof.

Theorem 3. *Let X be a symmetric space with symmetric r, f, g, S, and T selfmaps of X satisfying*

$$\begin{aligned}(r(fx,gy))^p \le \psi(a(r(fx,Ty))^p+ \qquad (1)\\ +(1-a)\max\{\alpha(r(fx,Sx))^p, \beta(r(gy,Ty))^p\},\\ (r(fx,Sx))^{p/2}(r(fx,Ty))^{p/2},\\ (r(Ty,fx))^{p/2}(r(Sx,gy))^{p/2}\frac{1}{2}[r^p(Sx,fx)+r^p(Ty,gy)]\})\end{aligned}$$

for all $x, y \in X$, where $0 < a, \alpha, \beta \le 1$, and $p \ge 1$. If $\{f, S\}$ and $\{g, T\}$ are owc, then f, g, S, and T have a unique common fixed point.

Proof. By hypothesis there exist points x and y such that $fx = Sx$ and $gy = Ty$. Suppose that $fx \ne gy$. Then, from (6),

$$\begin{aligned}(r(fx,gy))^p &\le \psi(a(r(fx,gy))^p + (1-a)\max\{0,0,0,(r(fx,gy))^p.0\})\\ &= \psi(r(fx,gy))^p) < r(fx,gy))^p,\end{aligned}$$

a contradiction. Therefore $r(fx, gy) = 0$, which implies that $fx = gy$. Suppose that there exists another point z such that $fz = Sz$. Then, using (6) one obtains $fz = Sz = gy = Ty = fx = Sx$ and hence $w = fx = fz$ is the unique point of coincidence of f and S. By symmetry there exists a unique point $v \in X$ such that $v = gz = Tv$. It then follows that $w = v$, w is a common fixed point of f, g, S, and T, and w is unique. □ $293_3 - 293_2$ Delete "*satisfying $f(X) \subset T(X), g(X) \subset S(X)$, and*"

294_3 Replace the period at the end of the line with a comma.

294_2 *If* should read *for each $x, y \in X$ such that $Tx \ne Ty$. If*

$295^1 - 295_2$ *implies* should read *, along with SX or TX complete and (10) imply*

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References

[1] G. Jungck and B. E. Rhoades, *Fixed point theorems for occasionally weakly compatible mappings*, Fixed Point Theory, **7**(2006), 287-296.

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