

Erratum on “A Strong Law of Large Numbers for Iterated Functions of Independent Random Variables,” Jan Wehr, *J. Stat. Phys.* 86:1373 (1997)

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Theorem 1 is stated with no assumptions about symmetry of the function f . As pointed out by D. Li and T. D. Rogers (*Ann. Appl. Prob.* 9:1175 (1999)), the proof given in the paper has a gap. While the theorem may still be true in the general case, at present we can only prove it under an additional symmetry assumption. For example, it is enough to assume that for any two variables, the function f is invariant under a certain permutation which interchanges these variables. The proof follows the usual martingale proof of the Kolmogorov's law of large numbers: we introduce σ -algebras \mathcal{G}_n generated by the variables $X_1^{(n)}, X_{k^n+1}^{(0)}, X_{k^n+2}^{(0)}, \dots$ and prove that the sequence $X_1^{(n)}$ is a reversed time submartingale relative to \mathcal{G}_n (this is where the symmetry assumption is used). A slight generalization of the Hewitt–Savage law finishes the proof as in the paper.

We emphasize that all examples given in the paper satisfy this assumption and thus our conclusions apply to them. See the above mentioned paper of Li and Rogers for some results in the nonsymmetric case.