1116-46-2212 **William A. Feldman*** (`wfeldman@uark.edu`), University of Arkansas, Department of Mathematical Sciences, Fayetteville, AR 72701. *Nonlinear operators satisfying order theoretic properties on vector-valued functions.* Preliminary report.

Let $C(X,E)$ denote the space of all continuous functions from a compact topological space X to a Banach lattice E and similarly for $C(Y,F)$. Properties of non-linear operators that are monotone (order-preserving) from $C(X,E)$ to $C(Y,F)$ are considered. The analysis includes operators T that are finitely disjointness preserving (i.e., $\wedge f_i = 0$ for a finite collection implies $\wedge Tf_i = 0$) and satisfy a property related to disjointly additivity (i.e., related to $f \wedge g = 0$ for $f, g \geq 0$, then $T(f+g) = T(f) + T(g)$). Given an appropriate continuity assumption for T, it is shown that $Tf(y)$ can be identified with the value of f at one point $x \in X$ dependent on y. This is then analogous to the scalar-valued and linear situation of a weighted composition operator. (Received September 22, 2015)