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., $\bigwedge f_i = 0$ for a finite collection implies $\bigwedge Tf_i = 0$) 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)