

ABSTRACT. Let  $K$  be a compact metrizable group and  $\Gamma$  be a group of automorphisms of  $K$ . We first show that each  $\alpha \in \Gamma$  is distal on  $K$  implies  $\Gamma$  itself is distal on  $K$ , a local to global correspondence provided  $\Gamma$  is a generalized  $\overline{FC}$ -group or  $K$  is a connected finite-dimensional group. We also prove a connection between distality and ergodicity which is used to show that ergodic actions of nilpotent groups on compact connected finite-dimensional abelian groups contains ergodic automorphisms.