We explore a graphical representation of groups differing from Cayley digraphs. While the automorphism group of a Cayley digraph is always isomorphic to the original group, the edge colored graphs we discuss can have larger groups of automorphisms. In addition, these graphs generalize to a family of loops with interesting properties, including Lagrange’s Theorem and the Sylow Theorems. We discuss known results and open questions for these graphs and their groups. (Received September 06, 2010)