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Arthur T. White* (arthur.white@wmich.edu), Department of Mathematics, Western Michigan University, Kalamazoo, MI 49008. *Graph Labelings, Imbeddings, and Colorings (Preliminary Report)*. Preliminary report.

Two connections among the concepts of the title are illustrated. (1) A plane cubic graceful graph of size q is converted to a conservative graph (by duality). The conservative graph becomes a current graph satisfying the Kirchoff Current Law, leading in turn to a triangular imbedding for $K(2q+1)$, which is also a 2-fold triple system. (2) A nicely chosen cubic voltage graph, edge labeled appropriately with elements from $Z(p)$, lifts to a graph imbedding of order p with nice coloring properties: the vertices are properly 2-colored, while the edges and regions are both properly 3-colored. Such an object is called a 3-map. (Received March 04, 2008)