1067-05-1821Maria Axenovich* (axenovic@iastate.edu), 412 Carver Hall, Ames, IA 50010, and Joan
Hutchinson and Michelle Lastrina. On pre-coloring extension to list-colorings.

The famous theorem of Thomassen states that no matter how the lists of 5 colors are assigned to the vertices of a planar graph, there is always a way to choose a color for each vertex from its list such that the resulting coloring is proper (so that adjacent vertices receive distinct colors). Earlier, Erdős, Rubin, and Taylor, and, independently, Borodin proved that any graph (with few exceptions) could be properly colored from any list assignment if the list size of each vertex is equal to its degree. Here, we shall show how to strengthen these results when some distant vertices are precolored. (Received September 21, 2010)