962-05-1411 **Nathaniel Dean*** (nated@caam.rice.edu), Dept. of Computational and Applied Math., Rice University, MS-134, 6100 Main Street, Houston, TX 77005. *Convex Drawing of Nonplanar Graphs.*

Let D be a drawing of a graph G in the plane where any pair of edges may cross any number of times. Define an *even edge* of D to be an edge that is crossed an even number of times in D. We generalize at least two of Tutte's theorems by proving the following result: *if the even edges induce a 3-connected graph H and some planar embedding of H has at least one empty face, then G has a rectilinear drawing where the drawing inherited by H is a convex embedding and no edge of H is crossed.* This leads to other results on drawing nonplanar graphs in the plane. (Received October 03, 2000)