1067-32-1554 **Jerry R. Muir, Jr.*** (muirj2@scranton.edu), Department of Mathematics, University of Scranton, Scranton, PA 18510. *The Roles Played by Order of Convexity or Starlikeness and the Bloch Condition in the Extension of Mappings from the Disk to the Ball.* Preliminary report.

Given f, a normalized ($f(0) = 0$, $f'(0) = 1$) locally univalent function defined on the open unit disk of $\mathbb{C}$, we consider the extension of f to the open unit ball of $\mathbb{C}^n$ given by $F(z) = (f(z_1) + G(\sqrt{f'(z_1)}\,\hat{z}), \sqrt{f'(z_1)}\,\hat{z})$, $\hat{z} = (z_2, \ldots, z_n) \in \mathbb{C}^{n-1}$. Here G is a complex-valued holomorphic function defined on a ball in $\mathbb{C}^{n-1}$ of possibly infinite radius centered at 0 such that $G(0) = 0$ and $DG(0) = 0$. It is known that, if f is convex or starlike (univalent), then F inherits the same property when G is a homogeneous polynomial of degree 2 of sufficiently small norm. We consider what additional conditions on f will allow for G to have terms of degree greater than 2 in its expansion about 0 and have F still possess the relevant geometric property. (Received September 21, 2010)