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**A. F. Beardon** and **David Minda\*** (David.Minda@math.uc.edu), Department of Mathematical Sciences, Cincinnati, OH 45221-0025. *Dieudonné points of holomorphic self-maps of regions.*

Schwarz's Lemma says that if a holomorphic self-map  $f$  of the unit disk fixes the origin then  $|f'(0)| \leq 1$ . In 1931, Dieudonné extended this by showing that  $|f'(z)| \leq 1$  when  $|z| < \sqrt{2} - 1$ . We show that there is no analog of Dieudonné's Lemma for a simply connected hyperbolic region unless the region is a disk and the fixed point is the center. We also discuss the analogue of Dieudonné's result for multiply connected hyperbolic regions. In order to do this, we establish a local version of the Aumann-Carathéodory Rigidity Theorem, and we determine the maximal number of points fixed by some non-trivial conformal automorphism of a region in terms of its connectivity. (Received August 28, 2006)